

Sequence\_Listing\_0088562\_015US0.TXT  
SEQUENCE LISTING

<110> ACE Biosciences A/S  
<120> Campylobacter polypeptides  
<130> 0088562-015US0  
<150> PCT/DK2004/000803  
<151> 2004-11-19  
<150> DK PA 2003 01726  
<151> 2003-11-21  
<150> US 06/524,617  
<151> 2003-11-25  
<160> 123  
<170> PatentIn version 3.5  
<210> 1  
<211> 445  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:1 - cj0092)  
<400> 1  
Met Lys Lys Ile Leu Phe Ile Gly Ser Leu Val Met Ala Ser Leu Leu  
1 5 10 15  
Tyr Ala Gln Gly Ser Gln Pro Val Glu Ile Thr Gln Gln Asp Ile Asn  
20 25 30  
Thr Gln Asn Glu Met Ser Asp Ala Ser Thr Lys Asp Ile Thr Pro Lys  
35 40 45  
Ser Ile Glu Asp Phe Phe Glu Glu Phe Ala Asp Asn Phe Gly Ile Glu  
50 55 60  
Tyr Gly Ile Thr Lys Asp Gly Lys Thr Phe Tyr Thr Gly Lys Ser Thr  
65 70 75 80  
Val Ala Val Asn Asp Thr Asp Pro Gln Phe Ala Gln Ala Leu Gln Asn  
85 90 95  
Ala Tyr Gln Lys Ala Met Leu Asn Leu Gln Ser Glu Phe Ile Arg Asp  
100 105 110  
Ala Phe Gly Arg Ile Ala Thr Ser Lys Ile Gln Asn Tyr Glu Ala Asp  
115 120 125  
Asn Ser Thr Asn Ala Lys Glu Phe Asp Glu Leu Pro Lys Gly Asp Lys  
130 135 140

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Val Asp Gln Ile Leu Asn Lys Leu Thr Gln Leu Ala Gly Ala Gln Leu
145 150 155 160

Asp Lys Ala Leu Lys Asp Leu Gly Ile Asp Thr Asn Ser Leu Ser Glu
165 170 175

Asp Arg Lys Lys Thr Leu Leu Lys Gln Glu Phe Leu Asn Lys Thr Met
180 185 190

Thr Asn Ala Ile Gly Ser Met Ser Gly Leu Val Pro Val Gln Thr Ile
195 200 205

Val Thr Gln Arg Arg Gly Glu Tyr Asp Val Gly Val Val Ala Val Ile
210 215 220

Ser Asn Lys Thr Arg Gln Leu Ala Lys Asp Met Ala Leu Ala Arg Gln
225 230 235 240

Ser Ala Ile Lys Gly Lys Gly Lys Ala Ile Ser Glu Tyr Leu Pro Lys
245 250 255

Asp Thr Lys Gly Phe Leu Asn Glu Tyr Gly Ile Arg Leu Val Tyr Asp
260 265 270

Glu Asn Gly Ala Pro Ile Ile Leu Ser Tyr Gly Asn Trp Gly Tyr Val
275 280 285

Ala Asp Pro Ser Asn Ala Lys Lys Thr Asn Ile Leu Glu Asp Arg Ala
290 295 300

Lys Glu Thr Ala Leu Thr Met Ala Asp Ala Ala Ile Ile Glu Phe Ile
305 310 315 320

Asn Thr Asn Leu Ser Leu Lys Asp Glu Arg Thr Thr Gly Asp Thr Tyr
325 330 335

Glu Glu Ile Ile Lys Gln Ser Ile Asn Val Asn Asp Ser Ser Thr Gln
340 345 350

Glu Gln Thr Gln Asn Ile Thr Asn Ile Ile Asp Lys Val Asn Ser Lys
355 360 365

Ile Lys Ala Ser Ala Ser Gly Lys Ile Arg Gly Ile Arg Thr Leu Lys
370 375 380

Lys Trp Ser Tyr Thr Ser Glu Asn Gly Ile Glu His Val Gly Ala Val
385 390 395 400

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Arg Phe Tyr Ser Tyr Glu Asn Leu Ala Asn Thr Asn Glu Ala Leu Asn  
405 410 415

Ser Lys Ser Asn Ala Thr Lys Asn Glu Ala Lys Lys Ser Ser Ile  
420 425 430

Gln Arg Ser Ser Asn Val Val Asn Ser Met Asp Asp Phe  
435 440 445

<210> 2

<211> 412

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:2 - Cj0005)

<400> 2

Met Lys Gln Asn Asp Gln Lys Glu Asn Arg Arg Asp Phe Leu Lys Asn  
1 5 10 15

Ile Gly Leu Gly Leu Phe Gly Ile Ser Val Leu Ser Asn Phe Ser Phe  
20 25 30

Glu Asn Phe Leu Gly Ser Lys Ala Leu Ala Lys Glu Leu Pro Asp Phe  
35 40 45

Lys Ile Glu Gly Lys Lys Asp Leu Ile Tyr His Gly Glu Lys Pro Leu  
50 55 60

Thr Ala Glu Thr Glu Ile Tyr Ala Leu Asp Ser Asp Phe Thr Lys Pro  
65 70 75 80

Glu Asn Phe Phe Val Arg Asn Asn Gly Leu Pro Pro Ser Leu Glu Thr  
85 90 95

Ile Lys Glu Arg Leu His Lys Gly Trp Thr Leu Glu Ile Asp Gly Glu  
100 105 110

Ser Ile Ile Asn Lys Lys Ser Tyr Thr Ile Glu Asp Leu Lys Lys Lys  
115 120 125

Phe Lys Thr Tyr Thr Tyr Ala Leu Thr Val Glu Cys Gly Gly Asn Gly  
130 135 140

Arg Ser Glu Val Ile Pro Ser Thr Lys Gly Thr Gln Trp Gly Tyr Gly  
145 150 155 160

Ala Val Ala Cys Gly Arg Trp Thr Gly Val Arg Leu Lys Asp Ile Leu  
165 170 175

Lys Asp Cys Gly Ile Lys Asn Asp Ala Val Tyr Ile Gly Tyr Tyr Gly

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180

185

190

Ile Asp Thr Lys Leu Asn Gly Glu Glu Thr Ser Pro Ile Ser Arg Gly  
 195 200 205

Val Pro Ile Ser Lys Ala Leu Gln Asp Glu Thr Leu Ile Ala Trp Ala  
 210 215 220

Tyr Glu Gly Lys Asp Ile Pro Leu Val Asn Gly Tyr Pro Leu Arg Leu  
 225 230 235 240

Val Cys Gly Gly Tyr Pro Ala Ser Thr Ser Gly Lys Trp Leu Tyr Lys  
 245 250 255

Ile Ser Val Arg Asn Lys Ile His Asp Gly Glu Lys Met Glu Gly Ser  
 260 265 270

Tyr Lys Val Pro Val Asn Pro Val Lys Pro Gly Asp Phe Asn Tyr Lys  
 275 280 285

Gly Glu Met Lys Ile Ile Glu Ser Met Pro Ile Arg Ser Val Ile Thr  
 290 295 300

Asn Ile Lys Asn Gly Ser Glu Ile Lys Ala Asn Lys Lys Phe Glu Val  
 305 310 315 320

Arg Gly Lys Ala Trp Ala Gly Glu Leu Glu Val Ser Glu Val Tyr Val  
 325 330 335

Ser Asn Asp Tyr Gly Val Thr Trp Thr Lys Ala Lys Val Glu Lys Pro  
 340 345 350

Leu Asn Arg Leu Ala Trp Gln Lys Trp Ser Ala Gln Ile Ser Ile Pro  
 355 360 365

Thr Lys Gly Tyr Tyr Glu Ile Trp Ala Arg Ala Ile Asp Ser Gln Gly  
 370 375 380

Asn Ser Gln Pro Met Val Leu Ala Gln Trp Asn Pro Gly Gly Tyr Ile  
 385 390 395 400

Asn Asn Ala Cys His Arg Val Asn Val Tyr Gly Val  
 405 410

&lt;210&gt; 3

&lt;211&gt; 331

&lt;212&gt; PRT

&lt;213&gt; Campylobacter jejuni (SEQ ID NO:3 - Cj0029)

## Sequence\_Listing\_0088562\_015U0.TXT

&lt;400&gt; 3

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Met Lys Lys Ala Lys Ser Arg Ile Ala Ile Leu Gly Thr Gly Gly Thr
 1           5           10
Ile Ala Gly Phe Ile Asp Ser Thr Ile Ala Thr Thr Gly Tyr Ala Ala
 20           25           30
Gly Ala Ile Asp Ile Asp Val Leu Ile Lys Ala Val Pro Gln Ile Arg
 35           40           45
Asp Leu Ala Asp Ile Ser Trp Glu Gln Ile Ala Asn Ile Asp Ser Ser
 50           55           60
Asn Met Cys Asp Glu Ile Trp Leu Arg Leu Ala Lys Lys Ile Ala Lys
 65           70           75           80
Leu Phe Ala Glu Gly Ile Asp Gly Val Val Ile Thr His Gly Thr Asp
 85           90           95
Thr Met Glu Glu Thr Ala Tyr Phe Leu Asn Leu Thr Ile Lys Ser Asp
100           105           110
Lys Pro Val Val Leu Val Gly Ala Met Arg Pro Ser Thr Ala Ile Ser
115           120           125
Ala Asp Gly Pro Lys Asn Leu Tyr Asn Ala Val Ala Leu Val Val Asn
130           135           140
Lys Glu Ala Lys Asn Lys Gly Val Met Val Ala Ile Asn Asp Lys Ile
145           150           155           160
Leu Ser Ala Arg Gly Val Val Lys Thr His Ser Leu Asn Val Asp Ala
165           170           175
Phe Ser Ser Pro Asp Phe Gly Asp Leu Gly Tyr Ile Val Asp Gly Lys
180           185           190
Val Phe Phe Tyr Asn Asn Val Ile Lys Ala His Thr Lys Asn Ala Pro
195           200           205
Phe Asp Val Ser Lys Leu Thr Ser Leu Pro Lys Val Asp Ile Leu Tyr
210           215           220
Ser Tyr Ser Asn Asp Gly Ser Gly Val Ala Ala Lys Ala Leu Phe Glu
225           230           235           240
His Gly Thr Lys Gly Ile Val Val Ala Gly Ser Gly Ala Gly Ser Ile
245           250           255

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His Lys Asn Gln Lys Asp Val Leu Lys Glu Leu Leu Lys Lys Gly Leu  
260 265 270

Lys Val Val Val Ser Ser Arg Val Val Ala Gly Cys Val Ala Val Ser  
275 280 285

Asp Ser Asp Glu Lys Leu Gly Phe Ile Ser Ala Glu Asp Leu Asn Pro  
290 295 300

Gln Lys Ala Arg Val Leu Leu Met Leu Ala Leu Thr Lys Thr Ser Asp  
305 310 315 320

Pro Lys Lys Ile Gln Glu Tyr Phe Leu Lys Tyr  
325 330

<210> 4  
<211> 347  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:4 - Cj0037)

<400> 4

Met Lys Lys His Ile Leu Leu Leu Gly Leu Cys Leu Ser Leu Ser Leu  
1 5 10 15

Ser Ala Lys Ser Val Ser Asp Tyr Lys Val Gly Glu Glu Leu Ser Asp  
20 25 30

Lys Glu Gly Val Glu Tyr Phe Lys Glu Leu Ser Lys Arg Pro Val Gln  
35 40 45

Glu Trp Pro Asn Lys Asn Leu Ser Ile Asn Asp Val Pro Lys Gly Lys  
50 55 60

Gln Gly Asp Leu Ile Arg Tyr Gly Ile Glu Leu Leu Ser Lys Thr Glu  
65 70 75 80

Ser Thr Leu Gly Pro Tyr Ser Lys Leu Lys Lys Thr Ser Asn Glu Val  
85 90 95

Asn Cys Ile Ser Cys His Met Asp Asn Asp Gly Asn Gly Leu Pro Gly  
100 105 110

Thr Lys Lys Tyr Val Ile Pro Phe Leu Asn Ile Leu Asn Asn Tyr Pro  
115 120 125

Arg Leu Asp Ile Glu Thr Met Lys Ile Ile Ser Val Glu Asp Arg Ile  
130 135 140

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Arg Gly Met Gly Gly Thr Asp Ser His Arg Phe Pro Asn Asp Ser Lys  
145 150 155 160

Glu Met Lys Ala Ile Leu Ala Tyr Phe Lys Trp Leu Lys Glu Ala Tyr  
165 170 175

Gly Ile Lys Asp Gly Val Lys Leu Glu Gly Asp Phe Phe Ala Lys Met  
180 185 190

Asn Phe Pro Asn Arg Pro Ala Asp Pro Val Arg Gly Lys Lys Leu Phe  
195 200 205

Glu Glu Asn Cys Val Ala Cys His Gly Glu Arg Gly Leu Gly Val Lys  
210 215 220

Asn Asp Asn Tyr Glu Gln Gly Ser Gly His Leu Tyr Pro Ser Leu Leu  
225 230 235 240

Ile Tyr Pro Asp Gly Gly His Met Ala Met Ile Pro Phe Leu Ala Arg  
245 250 255

Phe Leu Lys Ser Ala Met Pro Phe Gly Ala Ser Ala Asp Asn Pro Ile  
260 265 270

Leu Ser Asp Glu Asp Ala Leu Asp Ile Ala Ala Tyr Val Asn Thr Gly  
275 280 285

Phe Val Arg Met Pro Ile Thr Thr Thr Glu Asn Arg Ala Gly Leu Asp  
290 295 300

Thr Ala Tyr Ser Lys Ser Pro Ser Leu Lys Pro Glu Tyr Phe Ala Ser  
305 310 315 320

Pro Gln Gln Asn Leu Asp Pro Lys Glu Tyr Ile Lys Val Lys Tyr Gly  
325 330 335

Pro Trp Lys Asn Pro Asn His Phe Pro Gly Glu  
340 345

<210> 5  
<211> 400  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:5 - Cj0093)  
<400> 5

Met Lys Ile Ile Lys Ile Leu Phe Leu Gly Leu Phe Leu Ser Leu Ser  
1 5 10 15

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Leu Asn Ala Lys Val Ile Thr Thr Thr Ser Thr Lys Ser Ser Thr Gly  
20 25 30

Glu Gly Thr Gly Leu Thr Arg Glu Asp Ala Ile Asn Asn Ala Ile Ile  
35 40 45

Glu Ala Ile Gly Lys Met Ser Gly Val Ser Ile Asn Ser Leu Lys Lys  
50 55 60

Ser Asn Thr Ser Val Ser Thr Asp Asn Ser Gly Ser Asn Ile Gln Asp  
65 70 75 80

Asn Tyr Ser Glu Gln Ile Ser Lys Ala Thr Lys Gly Arg Ala Asp Thr  
85 90 95

Tyr Glu Ile Asn Ser Val Glu Gln Asp Ala Asn Gly Lys Tyr Thr Ala  
100 105 110

Asn Val Thr Ile Phe Lys Thr Thr Thr Thr Lys Lys Tyr Gln Ala Pro  
115 120 125

Gly Leu Ser Ala Asp Asn Arg Arg Ser Ile Thr Val Phe Asp Ser Thr  
130 135 140

Pro Asp Ala Ala Lys Arg Gly Ile Gly Ser Ala Leu Gln Gln Lys Ile  
145 150 155 160

Ile Ser Asp Leu Leu Gln Ser Arg Lys Phe Asn Val Leu Asp Arg Asp  
165 170 175

Ser Ser Gly Tyr Tyr Glu Met Glu Lys Ala Leu Ile Lys Ser Gly Asp  
180 185 190

Ala Ala Ser Asp Glu Val Tyr Lys Leu Lys Asn Met Leu Ala Thr Asp  
195 200 205

Tyr Ile Leu Leu Phe Ser Ile Ser Gly Leu Glu Gly Lys Gln Lys Thr  
210 215 220

Ser Asn Leu Thr Gly Lys Ser Lys Thr Glu Ile Glu Val Ile Val Asp  
225 230 235 240

Tyr Arg Val Leu Leu Phe Ala Thr Arg Gln Ile Lys Phe Ser Asn Thr  
245 250 255

Leu Ser Met Lys Val Asn Leu Lys Asp Asn Ser Leu Ser Ala Asn Glu  
260 265 270



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Thr Ala Leu Lys Gln Ile Ala Asn Arg Ile Ala Gly Asp Ile Leu Asn  
275 280 285

Ala Ile Tyr Pro Leu Lys Val Ala Ser Val Glu Asn Asn Glu Val Ile  
290 295 300

Phe Ser Gln Ser Leu Asn Gln Gly Asp Val Tyr Glu Cys Phe Ala Leu  
305 310 315 320

Gly Lys Val Ile Lys Asp Thr Tyr Thr Lys Glu Asn Thr Gly Arg Val  
325 330 335

Glu Ser Lys Thr Gly Ser Ile Glu Ile Thr Arg Thr Ser Pro Lys Phe  
340 345 350

Ser Tyr Ala Lys Ile Thr Glu Gly Ser Val Lys Val Gly Asp Ile Cys  
355 360 365

Arg Pro Leu Ser Asn Thr Gly Ser Gly Asn Gly Tyr Thr Ile Gly Arg  
370 375 380

Asp Ala Asn Tyr Gln Thr Gln Glu Gly Gly Gly Val Asn Leu Gly Phe  
385 390 395 400

<210> 6  
<211> 465  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:6 - Cj0107)

<400> 6

Met Gln Gly Phe Ile Ser Gln Val Leu Gly Pro Val Val Asp Val Asp  
1 5 10 15

Phe Asn Asp Tyr Leu Pro Gln Ile Asn Glu Ala Ile Val Val Asn Phe  
20 25 30

Glu Ser Glu Gly Lys Lys His Lys Leu Val Leu Glu Val Ala Ala His  
35 40 45

Leu Gly Asp Asn Arg Val Arg Thr Ile Ala Met Asp Met Thr Asp Gly  
50 55 60

Leu Val Arg Gly Leu Lys Ala Glu Ala Leu Gly Ala Pro Ile Ser Val  
65 70 75 80

Pro Val Gly Glu Lys Val Leu Gly Arg Ile Phe Asn Val Thr Gly Asp  
85 90 95

Leu Ile Asp Glu Gly Glu Glu Ile Ser Phe Asp Lys Lys Trp Ala Ile

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100

105

110

His Arg Asp Pro Pro Ala Phe Glu Asp Gln Ser Thr Lys Ser Glu Ile  
 115 120 125

Phe Glu Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro Tyr Ala Lys  
 130 135 140

Gly Gly Lys Val Gly Leu Phe Gly Gly Ala Gly Val Gly Lys Thr Val  
 145 150 155 160

Ile Ile Met Glu Leu Ile His Asn Val Ala Phe Lys His Ser Gly Tyr  
 165 170 175

Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly Asn Asp Leu  
 180 185 190

Tyr Asn Glu Met Lys Glu Ser Asn Val Leu Asp Lys Val Ala Leu Cys  
 195 200 205

Tyr Gly Gln Met Asn Glu Pro Pro Gly Ala Arg Asn Arg Ile Ala Leu  
 210 215 220

Thr Gly Leu Thr Met Ala Glu Tyr Phe Arg Asp Glu Met Gly Leu Asp  
 225 230 235 240

Val Leu Met Phe Ile Asp Asn Ile Phe Arg Phe Ser Gln Ser Gly Ser  
 245 250 255

Glu Met Ser Ala Leu Leu Gly Arg Ile Pro Ser Ala Val Gly Tyr Gln  
 260 265 270

Pro Thr Leu Ala Ser Glu Met Gly Lys Phe Gln Glu Arg Ile Thr Ser  
 275 280 285

Thr Lys Lys Gly Ser Ile Thr Ser Val Gln Ala Val Tyr Val Pro Ala  
 290 295 300

Asp Asp Leu Thr Asp Pro Ala Pro Ala Thr Val Phe Ala His Leu Asp  
 305 310 315 320

Ala Thr Thr Val Leu Asn Arg Ala Ile Ala Glu Lys Gly Ile Tyr Pro  
 325 330 335

Ala Val Asp Pro Leu Asp Ser Thr Ser Arg Met Leu Asp Pro Asn Ile  
 340 345 350

Ile Gly Glu Glu His Tyr Lys Val Ala Arg Gly Val Gln Ser Val Leu

355

Gln Lys Tyr Lys Asp Leu Gln Asp Ile Ile Ala Ile Leu Gly Met Asp  
370 375 380

Glu Leu Ser Glu Glu Asp Lys Leu Val Val Glu Arg Ala Arg Lys Ile  
385 390 395 400

Glu Lys Phe Leu Ser Gln Pro Phe Phe Val Ala Glu Val Phe Thr Gly  
405 410 415

Ser Pro Gly Lys Tyr Ile Ser Leu Glu Asp Thr Ile Ala Gly Phe Lys  
420 425 430

Gly Ile Leu Glu Gly Lys Tyr Asp His Leu Pro Glu Asn Ala Phe Tyr  
435 440 445

Met Val Gly Asn Ile Asp Glu Ala Ile Ala Lys Ala Asp Lys Leu Lys  
450 455 460

Gly  
465

<210> 7  
<211> 402  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:7 - Cj0112)

<400> 7

Met Lys Lys Ile Val Ala Ile Phe Leu Val Phe Leu Gly Ser Leu Trp  
1 5 10 15

Ala Glu Asp Pro Val Ile Asp Val Val Asn Ser Gly Val Val Leu Pro  
20 25 30

Lys Ile Ile Val Lys Asp Asn Ser Asn Leu Ser Asp Glu Asn Leu Lys  
35 40 45

Lys Ser Phe Tyr Asn Ile Ile Val Asn Asp Leu Lys Val Ser Ser Asn  
50 55 60

Phe Glu Val Val Ala Asn Ala Thr Glu Thr Ser Asn Tyr Ile Phe Glu  
65 70 75 80

Tyr Thr Leu Asn Lys Asn Gly Asn Thr Leu Ser Leu Asn Val Lys Ile  
85 90 95

Lys Ala Gly Gly Ser Asp Lys Ser Glu Gln Thr Tyr Thr Leu Asn Gly  
100 105 110

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Leu Glu Gln Tyr Pro Phe Leu Ala His Lys Ser Val Lys Ala Ser Val  
 115 120  
 Asn Ala Leu Gly Leu Ala Pro Val Asp Trp Met Asp His Lys Ile Leu  
 130 135  
 Ile Ala Arg Asn Ser Ser Lys Lys Ser Gln Ile Ile Met Ala Asp  
 145 150 155 160  
 Tyr Thr Leu Thr Tyr Gln Lys Val Ile Val Asp Gly Gly Leu Asn Leu  
 165 170 175  
 Phe Pro Lys Trp Gly Asn Lys Glu Gln Thr Leu Phe Tyr Tyr Thr Ala  
 180 185 190  
 Tyr Asp His Asp Lys Pro Thr Leu Tyr Arg Tyr Asp Leu Asn Thr Asn  
 195 200 205  
 Lys Ala Ser Lys Ile Leu Ser Ser Gly Gly Met Val Val Ala Ser Asp  
 210 215 220  
 Val Asn Val Asp Gly Ser Lys Leu Leu Val Thr Met Ala Pro Lys Asp  
 225 230 235 240  
 Gln Pro Asp Val Tyr Leu Tyr Asp Leu Asn Thr Lys Asn Leu Thr Gln  
 245 250 255  
 Leu Thr Asn Tyr Ser Gly Ile Asp Val Asn Gly Asn Phe Ile Gly Ser  
 260 265 270  
 Asp Asp Ser Lys Val Val Phe Val Ser Asp Arg Leu Gly Tyr Pro Asn  
 275 280 285  
 Ile Phe Met Gln Asp Leu Asn Ser Asn Ser Ala Glu Gln Val Val Phe  
 290 295 300  
 His Gly Arg Asn Asn Ser Ala Val Ser Thr Tyr Lys Asp Phe Leu Val  
 305 310 315 320  
 Tyr Ser Ser Arg Glu Pro Asn Gln Ala Gly Val Phe Asn Ile Tyr Leu  
 325 330 335  
 Met Ser Ile Asn Ser Asp Tyr Ile Arg Gln Leu Thr Ala Asn Gly Lys  
 340 345 350  
 Asn Leu Phe Pro Arg Phe Ser Ser Asp Gly Gly Ser Ile Val Phe Ile  
 355 360 365

Sequence\_Listing\_0088562\_015U0.TXT

Lys Tyr Leu Gly Ala Gln Ser Ala Leu Gly Val Ile Arg Val Asn Ala  
370 375 380

Asn Lys Thr Phe Tyr Phe Pro Leu Arg Val Gly Lys Ile Gln Ser Ile  
385 390 395 400

Asp Trp

<210> 8  
<211> 296  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:8 - Cj0143)  
<400> 8

Met Lys Lys Ile Ile Leu Phe Ile Leu Ser Leu Gly Ile Phe Tyr Thr  
1 5 10 15

Phe Thr Gln Ala Lys Asn Leu Glu Gln Glu Gln Asn Thr Ser Ser Asn  
20 25 30

Leu Val Ser Val Ser Ile Ala Pro Gln Ala Phe Phe Val Lys Lys Ile  
35 40 45

Ala Ala Asn Thr Leu Asp Val Asn Val Ile Leu Pro Pro Asn Ser Asn  
50 55 60

Glu His Asn Phe Glu Phe Lys Pro Ser Thr Met Lys Lys Leu Glu Lys  
65 70 75 80

Ser Asp Ile Tyr Phe Thr Ile Gly Leu Glu Phe Glu Lys Val Phe Thr  
85 90 95

Asp Lys Phe Lys Gln Asn Phe Pro Lys Leu Gln Val Ile Asn Met Gln  
100 105 110

Lys Asn Ile Ala Leu Ile Gln Thr His Asp Thr His Glu His Ser His  
115 120 125

Glu His Glu His His Glu His Gly His Phe Asp Pro His Thr Trp Leu  
130 135 140

Asp Pro Ile Leu Val Gln Thr Met Ala Leu Asn Ile Tyr Asp Thr Leu  
145 150 155 160

Ile Gln Lys Tyr Pro Gln Asn Glu Asn Leu Tyr Lys Glu Asn Leu Asp  
165 170 175

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Lys Phe Leu Ala Glu Leu Asp Ser Leu Asn Leu Gln Ile Ala Ser Lys  
180 185 190

Leu Glu Lys Leu Lys Asn Arg Glu Phe Val Val Tyr His Pro Ser Trp  
195 200 205

Thr Tyr Phe Ala Lys Arg Tyr Asn Leu Thr Gln Ile Pro Val Glu Ile  
210 215 220

Leu Gly Lys Glu Pro Lys Ser Lys Asp Leu Gln Lys Leu Ile Thr Leu  
225 230 235 240

Met Lys Asp Lys Asn Leu Lys Val Ile Phe Val Gln Asn Gly Phe Pro  
245 250 255

Glu Asn Ala Ala Lys Thr Leu Ala Lys Glu Cys Asp Ala Lys Ile Tyr  
260 265 270

Lys Ile Asp His Leu Ser Tyr Asp Trp Glu Asn Glu Leu Leu Lys Thr  
275 280 285

Ala Asp Ala Phe Ser His Asn Leu  
290 295

<210> 9  
<211> 220  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:9 - Cj0169)

<400> 9

Met Phe Glu Leu Arg Lys Leu Pro Tyr Asp Thr Asn Ala Phe Gly Asp  
1 5 10 15

Phe Leu Ser Ala Glu Thr Phe Ser Tyr His His Gly Lys His His Asn  
20 25 30

Thr Tyr Val Thr Asn Leu Asn Asn Leu Ile Lys Asp Thr Glu Phe Ala  
35 40 45

Gly Lys Asp Leu Val Ser Ile Ile Lys Thr Ser Asn Gly Gly Val Phe  
50 55 60

Asn Asn Ala Ala Gln Val Tyr Asn His Asp Phe Tyr Phe Asp Cys Ile  
65 70 75 80

Lys Pro Ser Thr Gly Cys Gly Cys Gly Gly Ser Cys Gln Ser Ile Asp  
85 90 95

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Ala Asn Leu Gln Ala Ala Leu Glu Lys Glu Phe Gly Ser Leu Glu Asn  
100 105 110

Phe Lys Ala Glu Phe Ile Lys Gly Ala Thr Gly Val Phe Gly Ser Gly  
115 120 125

Trp Phe Trp Leu Val Tyr Asn Thr Lys Asn Gln Lys Leu Glu Phe Val  
130 135 140

Gly Thr Ser Asn Ala Ala Thr Pro Ile Thr Glu Asp Lys Val Pro Leu  
145 150 155 160

Leu Val Val Asp Val Trp Glu His Ala Tyr Tyr Val Asp His Arg Asn  
165 170 175

Ala Arg Pro Ala Tyr Leu Glu Lys Phe Tyr Ala His Ile Asn Trp Glu  
180 185 190

Phe Val Ala Lys Ala Tyr Glu Trp Ala Leu Lys Glu Gly Met Gly Ser  
195 200 205

Val Ser Phe Tyr Ala Asn Glu Leu His Pro Val Lys  
210 215 220

<210> 10

<211> 444

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:10 - Cj0193c)

<400> 10

Met Glu Val Lys Ala Lys Gln Leu Asp Ser Val Asn Ala Thr Ala Ser  
1 5 10 15

Val Lys Ile Pro Ser Gly Met Ile Lys Ser Glu Val Glu Asn Leu Ala  
20 25 30

Lys Lys Ala Ser Lys Ser Val Lys Met Asp Gly Phe Arg Pro Gly Lys  
35 40 45

Val Pro Val Ser Ala Val Leu Lys Arg Tyr Glu Arg Glu Leu Thr Gln  
50 55 60

Asp Ala Glu Gln Asn Leu Phe Lys Ser Ala Val Asn Ser Ala Leu Gln  
65 70 75 80

Glu Leu Lys Lys Glu Asn Lys Glu Leu Val Gly Glu Pro Tyr Phe Glu  
85 90 95

Lys Phe Asp Arg Lys Asp Gly Glu Ile Ile Ala Glu Leu Ile Leu Ser

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100  
 Phe Lys Pro Glu Ile Lys Leu Glu Gly Tyr Glu Lys Leu Ile Pro Glu  
 115 120 125  
 Tyr Gln Thr Pro Lys Val Ser Lys Lys Glu Ile Asp Glu Lys Lys Asp  
 130 135 140  
 Glu Leu Leu Lys Arg Phe Ala Thr Pro Glu Ala Ile Lys Thr Lys Arg  
 145 150 155 160  
 Ala Leu Lys Glu Gly Asp Phe Ala Lys Phe Asp Phe Glu Gly Phe Val  
 165 170 175  
 Asp Asp Lys Ala Phe Glu Gly Gly Lys Ala Glu Asn Tyr Val Leu Glu  
 180 185 190  
 Ile Gly Ser Lys Gln Phe Ile Pro Gly Phe Glu Asp Gly Met Val Gly  
 195 200 205  
 Met Lys Ile Gly Glu Glu Lys Asp Ile Lys Val Thr Phe Pro Lys Glu  
 210 215 220  
 Tyr Gly Ala Ala His Leu Ala Gly Lys Asp Ala Val Phe Lys Val Lys  
 225 230 235 240  
 Leu His Glu Ile Gln Glu Leu Lys Ile Pro Glu Leu Asp Asp Glu Met  
 245 250 255  
 Leu Lys Lys Leu Leu Pro Gly Glu Glu Lys Ala Ser Val Glu Val Leu  
 260 265 270  
 Asp Glu Lys Leu Lys Glu Gln Ile Lys Asn Glu Lys Leu Phe Lys Leu  
 275 280 285  
 Val Asn Asp Glu Leu Lys Gly Lys Phe Ala Asp Ala Leu Ile Glu Lys  
 290 295 300  
 Tyr Asn Phe Asp Leu Pro Lys Gly Ile Val Glu Gln Glu Thr Asp Met  
 305 310 315 320  
 Gln Met Arg Ala Ala Phe Asn Thr Phe Ser Glu Lys Glu Ile Glu Glu  
 325 330 335  
 Leu Lys Ala Ser Lys Glu Lys Tyr Gln Glu Lys Arg Asp Ser Phe Lys  
 340 345 350  
 Glu Glu Ala Gln Lys Ser Val Lys Leu Thr Phe Ile Ile Asp Glu Leu



355

360

365

Ala Lys Leu Arg Lys Ile Glu Val Asn Asp Gln Glu Leu Ile Gln Ala  
 370 375 380

Ile Tyr Phe Glu Ala Tyr Arg Tyr Gly Met Asn Pro Lys Glu His Leu  
 385 390 395 400

Glu Asn Tyr Lys Lys Gln Gly Ala Leu Pro Ala Val Lys Met Ala Leu  
 405 410 415

Ile Glu Glu Lys Leu Phe Asn Asp Ile Phe Ile Pro Lys Thr Glu Lys  
 420 425 430

Ser Glu Lys Val Ser Lys Lys Glu Lys Glu Asp Lys  
 435 440

&lt;210&gt; 11

&lt;211&gt; 318

&lt;212&gt; PRT

&lt;213&gt; Campylobacter jejuni (SEQ ID NO:11 - Cj0285c)

&lt;400&gt; 11

Met Phe Asp Glu Asn Ile Val Lys Thr Gly Ser Asn Glu Met Glu Leu  
 1 5 10 15

Val Asp Phe Arg Ile Phe Lys Gln Gly His Asp Lys Val Tyr Glu Gly  
 20 25 30

Ile Tyr Gly Val Asn Val Ser Lys Val Arg Glu Ile Ile Lys Ile Pro  
 35 40 45

Ser Leu Thr Glu Leu Pro Gly Val Pro Asp Tyr Ile Glu Gly Ile Phe  
 50 55 60

Asp Leu Arg Gly Val Val Ile Pro Val Val Asn Leu Ala Lys Trp Met  
 65 70 75 80

Gln Ile Thr Glu Pro Glu Ser Thr Met Leu Lys Pro Arg Val Ile Ile  
 85 90 95

Thr Glu Phe Ser Asn Ile Leu Ile Gly Phe Ile Val His Glu Ala Lys  
 100 105 110

Arg Ile Arg Arg Ile Asn Trp Lys Asp Ile Glu Pro Ala Thr Phe Ser  
 115 120 125

Thr Gly Ser Gly Ala Leu Asp Lys Gly Lys Ile Thr Gly Val Thr Arg  
 130 135 140

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Ile Glu Asn Asp Glu Val Leu Leu Ile Leu Asp Leu Glu Ser Val Val  
145 150 155 160

Glu Asp Leu Gly Ile Tyr Ala Pro Lys Thr Asp Ile Asp Phe Gly Lys  
165 170 175

Ile Glu Lys Phe Thr Gly Thr Ala Leu Ile Leu Asp Asp Ser Met Thr  
180 185 190

Ala Arg Lys Arg Val Lys Glu Met Met Gln Gln Met Gly Phe Gln Val  
195 200 205

Val Glu Ala Lys Asp Gly Val Glu Gly Ile Asn Lys Leu Glu Glu Leu  
210 215 220

Ser Gln Ile Tyr Gly Glu Ser Leu Asn Asp Thr Leu Lys Ile Ile Val  
225 230 235 240

Ser Asp Val Glu Met Pro Gln Met Asp Gly Phe His Phe Ala Ala Arg  
245 250 255

Ile Lys Glu Asp Pro Arg Phe Lys Asp Ile Pro Ile Val Phe Asn Ser  
260 265 270

Ser Leu Ser Asn Glu Phe Met Asn Glu Lys Gly Val Gln Glu Ala Gly  
275 280 285

Gly Glu Gly Tyr Leu Val Lys Phe Asn Ala Ser Asp Phe Phe Asn Glu  
290 295 300

Ile Ala Lys Val Ile Lys Lys His Gln Ser Gln Glu Gln Gly  
305 310 315

<210> 12  
<211> 341  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:12 - Cj0358)

<400> 12

Met Lys Val Lys Ser Leu Leu Ile Ala Ser Leu Val Ala Phe Ser Ser  
1 5 10 15

Leu Asn Ala Ala Ser Leu Ile Asp Glu Ala Lys Asn Ser Gly Leu Val  
20 25 30

Ala Leu Pro Lys Asp Gln Lys Gly Val Asp Glu Ile Leu Lys Gln Asn  
35 40 45

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Gly Val Lys Ala Ser Glu Phe Thr Leu Glu Lys Ala Glu Leu Gly Lys  
50 55 60

Lys Leu Tyr Phe Glu Pro Arg Leu Ser Lys Ser Gly Ile Ile Ser Cys  
65 70 75 80

Asn Thr Cys His Asn Val Gly Leu Gly Gly Thr Asp Gly Ile Ser Thr  
85 90 95

Ala Ile Gly His Lys Trp Thr Ala Asn Pro His His Leu Asn Ser Pro  
100 105 110

Thr Val Tyr Asn Ala Val Leu Asn Asn Thr Gln Phe Trp Asp Gly Arg  
115 120 125

Ala Gly Thr Leu Ala Asp Gln Ala Lys Gly Pro Ile Gln Ala Asp Pro  
130 135 140

Glu Met Ala Thr Pro Ala Lys Leu Ala Val Glu Lys Ile Ser Ser Leu  
145 150 155 160

Pro Glu Tyr Val Ser Glu Phe Lys Lys Ile Tyr Gly Lys Ser Gly Val  
165 170 175

Asn Phe Asp Asn Ile Ala Asp Ala Ile Ala Asn Phe Glu Arg Thr Leu  
180 185 190

Ile Thr Pro Ser Arg Phe Asp Lys Phe Leu Glu Gly Asp Glu Lys Ala  
195 200 205

Leu Thr Lys Glu Glu Gln Lys Gly Leu Lys Leu Phe Ile Asp Lys Gly  
210 215 220

Cys Val Ala Cys His Asn Gly Val Asn Leu Gly Gly Asn Met Gln Ala  
225 230 235 240

Phe Glu Val Ala Gly Lys Tyr Lys Phe Ala Asn Leu Gly Asp Phe Lys  
245 250 255

Gly Asp Ala Asn Gly Met Val Lys Thr Pro Thr Leu Arg Asn Val Ala  
260 265 270

Glu Thr Ala Pro Tyr Phe His Asn Gly Ala Ile Trp Asn Leu Lys Asp  
275 280 285

Ala Ile Lys Glu Met Gly Ser Val Gln Leu Gly Ile Lys Ile Ser Asp  
290 295 300

Sequence\_Listing\_0088562\_015uS0.TXT

Lys Glu Ala Lys Ser Ile Glu Thr Phe Leu Lys Ser Leu Thr Gly Thr  
305 310 315 320

Lys Pro Ala Ile Val Tyr Pro Gln Leu Pro Ile Ser Thr Glu Lys Thr  
325 330 335

Pro Lys Pro Glu Leu  
340

<210> 13

<211> 365

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:13 - Cj0448c)

<400> 13

Met Phe Gly Ser Lys Ile Asn His Ser Asp Leu Gln Lys Leu Glu Glu  
1 5 10 15

Glu Asn Lys Asn Leu Thr His Lys Ile Glu Lys Phe Gln Ser Glu Asn  
20 25 30

Leu Glu Leu Lys Asn Lys Ile Thr Ser Leu Glu Gln Ala Ala Leu Glu  
35 40 45

Ser Lys Leu Lys Thr Asp Leu Leu Asn Val Leu Leu Thr Gly Val Leu  
50 55 60

Lys Asn Ile Thr Ile Ile Gln Gly Asp Met Leu Glu Asn Val Asn Lys  
65 70 75 80

Ala Glu Val Ile Ser Ser Tyr Ser Lys Thr Ser Leu Ala Glu Met Asp  
85 90 95

Glu Leu Asn His Ile Ala Asn Ser Ile Asn Ala Ser Leu Gly Asn Ile  
100 105 110

Thr Glu Ser Ala Asn Lys Thr Arg Asp Val Ala Gly Thr Leu His Arg  
115 120 125

Ser Val Asp Glu Ile Thr Asn Val Ile Asn Leu Ile Lys Asp Val Ser  
130 135 140

Asp Gln Thr Asn Leu Leu Ala Leu Asn Ala Ala Ile Glu Ala Ala Arg  
145 150 155 160

Ala Gly Glu His Gly Arg Gly Phe Ala Val Val Ala Asp Glu Val Arg  
165 170 175

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Lys Leu Ala Glu Lys Thr Gln Lys Ala Thr Thr Glu Val Glu Met Asn  
180 185 190

Ile Asn Leu Leu Lys Gln Asn Ala Asn Glu Met Tyr Thr Gln Ser Glu  
195 200 205

Gln Val Glu Lys Ile Ser Ile Asp Ser Asn Ala His Ile Met Ser Phe  
210 215 220

Ser Glu Lys Phe Thr His Leu Val Asn Glu Ala His Ser Thr Asn Ser  
225 230 235 240

Asn Ala Val Gly Ile Ala Ser Glu Ala Phe Val Ser Leu Ala Lys Leu  
245 250 255

Asp His Ile Ala Phe Lys Leu Asn Gly Tyr Lys Glu Ile Phe Ser Lys  
260 265 270

Ser Gly Lys Gln Leu Ala Asp His Thr Ser Cys Arg Leu Gly Lys Trp  
275 280 285

Leu Ala Ser Thr Gly Lys Glu Arg Phe Gly Gln Asn Lys Ser Phe Leu  
290 295 300

Lys Ile Asn Glu Pro His Glu Lys Val His Glu Asn Met Asn Asn Ala  
305 310 315 320

Ile Thr Ile Ala Asn Thr Glu Asp Ile Ser Lys Asp Ile Thr Gln His  
325 330 335

Ser Ile Ile Asn Lys Cys Glu Val Ala Glu Asn Ala Ser Leu Asp Leu  
340 345 350

Phe Asn Val Phe Lys Glu Met Leu Asp Glu Ser Asp His  
355 360 365

<210> 14

<211> 71

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:14 - Cj0449c)

<400> 14

Met Leu His Glu Tyr Arg Glu Leu Met Ser Glu Leu Lys Gly Lys Asp  
1 5 10 15

Ala His Phe Asp Lys Leu Phe Asp Arg His Asn Glu Leu Asp Asp Met  
20 25 30

Ile Lys Asp Ala Glu Glu Gly Arg Thr Ser Leu Ser Ser Met Glu Ile

35

40

45

Ser Thr Leu Lys Lys Glu Lys Leu His Val Lys Asp Glu Leu Ser Gln  
 50 55 60

Tyr Leu Ala Asn Tyr Lys Lys  
 65 70

<210> 15  
 <211> 444  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:15 - Cj0511)

<400> 15

Met Met Glu Leu Ile Leu Lys Thr Lys Arg Phe Phe Ala Gly Leu Ala  
 1 5 10 15

Gly Phe Ala Thr Thr Phe Ile Leu Cys Leu Phe Leu Thr Ser His Leu  
 20 25 30

Gln Ala Lys Val Asp Gln Lys Glu Glu Gln Val Gln Lys Arg Leu Glu  
 35 40 45

Ala Leu Asp Lys Leu Thr Lys Thr Leu Ala Ile Val Glu Gln Tyr Tyr  
 50 55 60

Val Asp Asp Gln Asn Ile Ser Asp Leu Val Asp Lys Ser Leu Ser Gly  
 65 70 75 80

Leu Leu Ser Asn Leu Asp Ala His Ser Ser Phe Leu Asn Glu Lys Asp  
 85 90 95

Phe Asn Asp Met Lys Ile Gln Thr Asn Gly Glu Phe Gly Gly Leu Gly  
 100 105 110

Ile Thr Val Gly Met Lys Asp Gly Ala Leu Thr Val Val Ser Pro Ile  
 115 120 125

Glu Gly Thr Pro Ala Asp Lys Ala Gly Ile Lys Ser Gly Asp Ile Ile  
 130 135 140

Leu Lys Ile Asn Asp Glu Ala Thr Leu Gly Ile Asn Leu Asn Asp Ala  
 145 150 155 160

Val Asp Lys Met Arg Gly Lys Pro Lys Thr Gln Ile Thr Leu Thr Ile  
 165 170 175

Phe Arg Lys Gly Ala Thr Lys Pro Phe Asp Val Thr Leu Thr Arg Glu  
 180 185 190

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Ile Ile Lys Ile Glu Ser Val Tyr Ala Lys Met Ile Glu Asn Glu Asn  
195 200 205

Ile Leu Tyr Leu Arg Val Thr Asn Phe Asp Lys Asn Val Val Asp Val  
210 215 220

Ala Ser Lys Glu Leu Lys Lys Tyr Pro Asn Val Lys Gly Val Ile Leu  
225 230 235 240

Asp Leu Arg Asn Asn Pro Gly Gly Leu Leu Asn Gln Ala Ile Gly Leu  
245 250 255

Val Asn Leu Phe Val Asp Lys Gly Val Ile Val Ser Gln Lys Gly Arg  
260 265 270

Ile Ala Ser Glu Asn Gln Glu Tyr Lys Ala Asp Pro Lys Asn Lys Ile  
275 280 285

Ser Asn Ala Ser Leu Val Val Leu Val Asn Gly Gly Ser Ala Ser Ala  
290 295 300

Ser Glu Ile Val Ser Gly Ala Leu Gln Asp Leu Lys Arg Gly Val Ile  
305 310 315 320

Val Gly Glu Asn Thr Phe Gly Lys Gly Ser Val Gln Gln Ile Ile Pro  
325 330 335

Ile Asn Lys Thr Glu Ala Leu Arg Leu Thr Ile Ala Arg Tyr Tyr Leu  
340 345 350

Pro Ser Gly Arg Thr Ile Gln Ala Val Gly Val Lys Pro Asp Ile Glu  
355 360 365

Val Phe Pro Gly Lys Val Asn Thr Gln Glu Asp Gly Phe Ser Ile Lys  
370 375 380

Glu Ser Asp Leu Lys Gln His Leu Glu Ser Glu Leu Glu Lys Ile Asp  
385 390 395 400

Lys Asn Lys Lys Glu Asp Lys Gln Glu Asn Lys Asp Asn Lys Asn Leu  
405 410 415

Ile Ser Gln Lys Gln Ile Asn Asp Asp Ala Gln Leu Lys Ser Ala Ile  
420 425 430

Asp Thr Ile Lys Ile Leu Asn Ile Lys Gln Gly Gln  
435 440

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<210> 16  
 <211> 311  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:16 - Cj0559)

<400> 16

Met Lys Lys Ile Asp Leu Ile Val Val Gly Ala Gly Pro Thr Gly Ile  
 1 5 10 15

Gly Cys Ala Val Glu Ala Lys Leu Lys Asn Lys Glu Val Leu Ile Leu  
 20 25 30

Glu Lys Ser Asn Asn Ile Cys Gln Thr Leu Met Gln Phe Tyr Lys Asp  
 35 40 45

Gly Lys Arg Val Asp Lys Ala Tyr Lys Gly Cys Glu Gly Thr Asn His  
 50 55 60

Gly His Val Pro Phe Glu Asp Gly Thr Lys Glu Ser Thr Ile Glu Thr  
 65 70 75 80

Phe Gln Asn Ala Leu Lys Glu His Asn Ile Glu Val Glu Phe Gly Ser  
 85 90 95

Glu Val Glu Ser Val Lys Asn Glu Asn Gly Val Phe Leu Val Ser Thr  
 100 105 110

Ala Lys Gly Val Tyr Glu Cys Lys Asn Ile Ile Val Ala Ile Gly Arg  
 115 120 125

Met Gly Lys Pro Asn Lys Pro Asp Tyr Lys Leu Pro Met Thr Leu Thr  
 130 135 140

Lys Ile Ile Asn Phe Asn Ala Asn Ser Val Leu Gly Asn Glu Lys Ile  
 145 150 155 160

Leu Val Val Gly Gly Gly Asn Ser Ala Ala Glu Tyr Ala Val Asp Leu  
 165 170 175

Ala Asn Ser Asn Gln Val Ser Leu Cys Tyr Arg Lys Lys Glu Phe Thr  
 180 185 190

Arg Leu Asn Asp Ile Asn Leu Lys Asp Ile His Glu Ala Gly Asn Ser  
 195 200 205

Gly Lys Val Glu Leu Lys Leu Gly Ile Asp Ile Asn Glu Val Glu Asp  
 210 215 220



Sequence\_Listing\_0088562\_015U0.TXT

Asp Asn Gly Lys Ala Lys Val Asn Phe Thr Asp Gly Thr Ser Asp Ile  
225 230 235 240

Tyr Asp Arg Ile Ile Tyr Ala Ile Gly Gly Ser Thr Pro Leu Asp Phe  
245 250 255

Leu Gln Lys Cys Gly Ile Asn Val Asp Asp Lys Gly Val Pro Leu Met  
260 265 270

Asp Glu Asn Lys Gln Ser Asn Val Lys Gly Ile Phe Val Ala Gly Asp  
275 280 285

Ile Ala Thr Lys Asn Gly Ala Ser Ile Val Thr Gly Leu Asn Asp Ala  
290 295 300

Val Lys Ile Leu Ser Val Leu  
305 310

<210> 17

<211> 331

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:17 - Cj0613)

<400> 17

Met Lys Lys Ile Leu Ser Leu Ser Val Thr Ser Leu Ala Leu Cys Gly  
1 5 10 15

Ala Leu Asn Ala Val Asp Leu Lys Ile Ala Gly Ser Ser Thr Val Tyr  
20 25 30

Pro Phe Thr Ser Phe Val Ala Glu Glu Tyr Ala Ser Ile Lys Asn Thr  
35 40 45

Lys Thr Pro Ile Val Glu Ser Leu Gly Thr Gly Gly Gly Phe Lys Val  
50 55 60

Phe Cys Glu Gly Thr Thr Asp Ile Ser Asn Ala Ser Arg Pro Met Lys  
65 70 75 80

Leu Ser Glu Phe Glu Thr Cys Lys Lys Ala Gly Val Thr Asp Ile Val  
85 90 95

Gly Met Met Ile Gly Tyr Asp Gly Ile Val Leu Ala Gln Asn Lys Thr  
100 105 110

Asn Ala Pro Leu Asn Ile Thr Lys Lys Glu Leu Phe Leu Ala Leu Ala  
115 120 125

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Lys Glu Ile Pro Gln Asn Gly Lys Leu Ile Pro Asn Pro Tyr Thr Asn  
130 135 140

Trp Asn Gln Ile Asn Lys Asn Leu Pro Asn Arg Lys Ile Ser Val Tyr  
145 150 155 160

Gly Pro Pro Ser Ser Ser Gly Thr Arg Asp Thr Ile Glu Glu Leu Val  
165 170 175

Met Ser Asp Val Ser Lys Lys Ile Pro Glu Tyr Lys Gly Glu Tyr Lys  
180 185 190

Thr Ile Arg Gln Asp Gly Ala Tyr Ile Pro Ser Gly Glu Asn Asp Asn  
195 200 205

Leu Ile Val Ser Lys Leu Thr Ile Asp Lys Asp Ala Phe Gly Ile Phe  
210 215 220

Gly Tyr Ser Phe Leu Val Ser Asn Ser Asp Lys Ile Asn Ala Ala Asn  
225 230 235 240

Ile Asp Gly Val Thr Pro Ser Glu Glu Ser Ile Ala Asp Glu Lys Tyr  
245 250 255

Glu Leu Ala Arg Ser Leu Phe Ile Tyr Ile Asn Ala Lys Lys Asn Pro  
260 265 270

Lys Glu Ala Phe Asp Phe Ala Lys Ile Tyr Met Ser Asp Asp Leu Ala  
275 280 285

Lys Ser Gly Gly Glu Leu Glu Lys Ile Gly Leu Val Pro Leu Ser Asp  
290 295 300

Asp Lys Leu Lys Ala Ser Gln Lys His Val Glu Asp Arg Lys Ile Leu  
305 310 315 320

Asn Asp Glu Leu Val Lys Ala Gly Lys Val Phe  
325 330

<210> 18

<211> 279

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:18 - Cj0636)

<400> 18

Met Gln Asn Ile Leu Ser Ser Phe Ala Gln Glu Lys Asn Val Cys Val  
1 5 10 15

Phe Ala Asn Thr Leu Lys Thr Ser Ile Glu Glu Leu Glu Lys Glu Phe

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20

25

30

Leu Lys Gln Asn Leu Lys Phe Lys Lys Ile Asn Val Tyr Cys Tyr Leu  
 35 40 45  
 Phe Asp Ala Lys Asp Lys Ala Ile Leu Ser Ser Met Lys Ala Phe Asn  
 50 55 60  
 Glu Ala His Phe Tyr Ile Gln Asn Tyr Ser Ser Tyr Leu Cys Ala Leu  
 65 70 75 80  
 Asn Leu Glu Val Lys Ala Gly Gln Ser Val Leu Asp Met Cys Ala Ala  
 85 90 95  
 Pro Gly Gly Lys Ser Ile Asn Leu Ala Asn Phe Met Gln Asn Thr Gly  
 100 105 110  
 Tyr Leu Ala Cys Asn Glu Met Ser Arg Asp Arg Phe Phe Ile Leu Gln  
 115 120 125  
 Lys Asn Leu Lys Asn Tyr Gly Val Asn Ala Lys Val Phe Met Lys Asp  
 130 135 140  
 Gly Lys Asn Ile Gly Asn Leu Cys Pro Leu Lys Phe Asp Lys Ile Leu  
 145 150 155 160  
 Leu Asp Ala Pro Cys Ser Thr Phe Ala Lys Ile Gly Phe Asp Leu Glu  
 165 170 175  
 Lys Ser Tyr Lys Glu Ile Lys Asn Ile Ala Lys Thr Gln Lys Lys Leu  
 180 185 190  
 Leu His Ser Ala Leu Lys Ala Leu Lys Ile Gly Gly Glu Leu Val Tyr  
 195 200 205  
 Ser Thr Cys Thr Phe Thr Lys Glu Glu Asn Glu Glu Val Ile Glu Asn  
 210 215 220  
 Ala Leu Lys Ser Glu Phe Lys Leu Glu Leu Leu Asp Ile Asp Leu Glu  
 225 230 235 240  
 Asn Val Glu Ala Lys Ala Gly Gln Ser Glu Glu Phe Ala Glu Ile Ser  
 245 250 255  
 Lys Cys Arg Arg Ile Leu Pro Ser Leu Asp Tyr Asp Gly Phe Phe Ile  
 260 265 270  
 Ala Lys Leu Arg Lys Leu Cys

275

<210> 19  
 <211> 238  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:19 - Cj0706)  
 <400> 19  
 Met Asn Lys Tyr Leu Glu Gln Leu Val Leu Leu Ser Lys Ile Asp Gln  
 1 5 10 15  
 Glu Ile Asp Ser Tyr Glu Pro Lys Ile Asp Ser Ile Asn Lys Thr Leu  
 20 25 30  
 Lys Asp Ala Glu Leu Lys Ile Glu Lys Ile Asn Ala Asp Leu Glu Lys  
 35 40 45  
 Ile Asp Glu Glu Ile Lys Asp Ile Glu Asn Gln Lys Ile Gln Asn Asn  
 50 55 60  
 Ala His Ile Ser Glu Phe Ser Ala Lys Ile Lys Asp Leu Ser Lys Lys  
 65 70 75 80  
 Ser Gly Val Val Lys Thr Glu Lys Glu Ala Asn Ala Leu Lys Ile Glu  
 85 90 95  
 Glu Asp Ile Ala Lys Glu Gln Leu Asp Ala Ala Asn Asp Glu Ile Val  
 100 105 110  
 Arg Leu Asp Lys Ile Leu Glu Asn Lys Glu Thr Tyr Lys Lys Glu Leu  
 115 120 125  
 Glu Glu Glu Lys Ile Lys Gln Glu Gln Asn Ile Asn Glu Ile Arg Val  
 130 135 140  
 Ser Ile Lys Ser Glu Met Glu Val Leu Glu Lys Asp Arg Met Ser Val  
 145 150 155 160  
 Tyr Asp Lys Lys Thr Lys Leu Val Ser Glu Met Asn Gln Lys Val Leu  
 165 170 175  
 Ser Phe Tyr Glu Lys Ile Arg Lys Trp Ala Lys Asn Thr Ala Val Val  
 180 185 190  
 Pro Val Lys Lys Gln Ala Cys Tyr Gly Cys Phe Met Lys Ile Tyr Asp  
 195 200 205  
 Lys Thr Tyr Leu Ser Val Val Lys Gly Glu Glu Ile Val Thr Cys Pro  
 210 215 220

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His Cys Gly Arg Ile Leu Tyr Lys Glu Gln Glu Glu Gln Asn  
225 230 235

<210> 20  
<211> 137  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:20 - Cj0715)  
<400> 20

Met Phe Ser Ile Lys Lys Thr Leu Leu Ile Leu Ala Ser Val Pro Met  
1 5 10 15

Phe Leu Ser Ala Thr Glu Tyr Gln Leu Ser Thr His Val Leu Asp Ile  
20 25 30

Thr Ser Gly Gln Pro Ala Pro Lys Val Lys Val Glu Leu Tyr Lys Leu  
35 40 45

Glu Ala Asn Gln Gln Trp Lys Lys Val Ser Glu Glu Phe Thr Glu Glu  
50 55 60

Asn Gly Arg Ile Gly Asp Leu Leu Pro Tyr Glu Lys Ala Glu Asn Arg  
65 70 75 80

Ala Phe Gly Ile Tyr Lys Leu Lys Phe Phe Thr Lys Asp Tyr Tyr Thr  
85 90 95

Ser His Lys Ile Asn Thr Phe Tyr Pro Phe Val Glu Val Ser Phe Glu  
100 105 110

Leu Ser Lys Asp Gln Lys His Tyr His Val Pro Ile Thr Leu Ser Pro  
115 120 125

Phe Gly Tyr Ser Thr Tyr Arg Gly Ser  
130 135

<210> 21  
<211> 175  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:21 - Cj0779)  
<400> 21

Met Ser Ile Val Asn Phe Lys Gly Asn Pro Val Lys Leu Lys Gly Asn  
1 5 10 15

Ser Val Glu Val Gly Ala Asp Ala Pro Lys Val Asn Leu Lys Ala Lys  
20 25 30

Sequence\_Listing\_0088562\_015uS0.TXT

Asp Leu Ser Val Ile Glu Ile Gly Ala Ala Gly Lys Thr Gln Ile Ile  
35 40 45

Leu Ser Val Pro Ser Leu Asp Thr Pro Val Cys Ala Thr Glu Ala Arg  
50 55 60

Glu Phe Asn Lys Lys Val Ala Ser Tyr Asn Gly Ala Glu Val Ile Val  
65 70 75 80

Val Ser Met Asp Leu Pro Phe Ala Met Gly Arg Phe Cys Ser Thr Glu  
85 90 95

Gly Ile Glu Asn Leu Ser Val Ala Ser Asp Phe Val Ala Lys Glu Phe  
100 105 110

Gly Glu Lys Tyr Gly Val Leu Ile Asn Glu Gly Ala Leu Glu Gly Leu  
115 120 125

Leu Ala Arg Ala Val Phe Val Ile Lys Glu Gly Lys Val Ala Tyr Lys  
130 135 140

Glu Leu Val Asn Glu Ile Thr Glu Met Pro Asp Ile Ala Lys Leu Asp  
145 150 155 160

Ala Phe Phe Gly Gly Ser Ser Cys Cys Gly Gly Cys Gly Cys His  
165 170 175

<210> 22

<211> 139

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:22 - Cj0909)

<400> 22

Met Lys Lys Ile Leu Leu Leu Gly Ala Leu Phe Ala Val Asn Leu Trp  
1 5 10 15

Ala Val Asn Asp Ile Glu Val Lys Asn Ala Phe Val Lys Gln Thr Pro  
20 25 30

Pro His Ala Gln Asn Ser Ala Ile Phe Leu Thr Ile Phe Asn Asn Thr  
35 40 45

Asn Lys Asp Ile Ala Leu Ile Ser Ala Lys Ser Asp Ile Ser Glu Val  
50 55 60

Ser Glu Leu His Thr His Ile His Lys Asp Gly Lys Met Met Met Gln  
65 70 75 80

Lys Ile Pro Glu Ile Ile Ile Lys Ala His Ser Ser Thr Glu Leu Lys

Ser Gly Gly Tyr His Ile Met Leu Leu Lys Leu Lys Lys Pro Ile Ile  
100 105 110

Lys Asp Thr Lys Val Asn Leu Asp Leu Lys Phe Asn Asn His Lys Thr  
115 120 125

Ile Glu Leu Lys Asn Ile Asp Ser Lys Glu Phe  
130 135

<210> 23

<211> 306

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:23 - Cj0994c)

<400> 23

Met Lys His Phe Leu Thr Leu Arg Asp Phe Ser Lys Glu Glu Ile Leu  
1 5 10 15

Ser Leu Val Asn His Ala Ser Glu Leu Lys Lys Glu Pro Lys Lys Leu  
20 25 30

Leu Gln Asp Lys Thr Leu Ala Met Ile Phe Glu Lys Asn Ser Thr Arg  
35 40 45

Thr Arg Met Ala Phe Glu Leu Ala Ile Thr Glu Leu Gly Gly Lys Ala  
50 55 60

Leu Phe Leu Ser Ser Asn Asp Leu Gln Leu Ser Arg Gly Glu Pro Val  
65 70 75 80

Lys Asp Thr Ala Arg Val Ile Gly Ala Met Val Asp Phe Val Met Met  
85 90 95

Arg Val Asn Lys His Glu Thr Leu Leu Glu Phe Ala Arg Tyr Ser Lys  
100 105 110

Ala Pro Val Ile Asn Ala Leu Ser Glu Leu Tyr His Pro Thr Gln Val  
115 120 125

Leu Gly Asp Leu Phe Thr Ile Lys Glu Trp Asn Lys Met Gln Asn Gly  
130 135 140

Ile Ala Lys Val Ala Phe Ile Gly Asp Ser Asn Asn Met Cys Asn Ser  
145 150 155 160

Trp Leu Ile Thr Ala Ala Ile Leu Gly Phe Glu Ile Ser Ile Ala Met  
165 170 175

Sequence\_Listing\_0088562\_015US0.TXT

Pro Lys Asn Tyr Lys Ile Ser Pro Glu Ile Trp Glu Phe Ala Met Lys  
180 185 190

Gln Ala Leu Ile Ser Gly Ala Lys Ile Ser Leu Gly Tyr Asp Lys Phe  
195 200 205

Glu Ala Leu Lys Asp Lys Asp Val Val Ile Thr Asp Thr Trp Val Ser  
210 215 220

Met Gly Glu Glu Asn Glu Lys Glu Arg Lys Ile Lys Glu Phe Glu Gly  
225 230 235 240

Phe Met Ile Asp Glu Lys Ala Met Ser Val Ala Asn Lys Asp Ala Ile  
245 250 255

Leu Leu His Cys Leu Pro Ala Tyr Arg Gly Tyr Glu Val Ser Glu Glu  
260 265 270

Ile Phe Glu Lys His Ala Asp Val Ile Phe Glu Glu Ala Arg Asn Arg  
275 280 285

Leu Tyr Val Val Lys Ala Leu Leu Cys Phe Leu Asp Asn Gln Arg Gly  
290 295 300

Arg Glu  
305

<210> 24  
<211> 190  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:24 - Cj0998c)

<400> 24

Met Lys Lys Ile Leu Val Ser Val Leu Ser Ser Cys Leu Leu Ala Ser  
1 5 10 15

Ala Leu Ser Ala Val Ser Phe Lys Glu Asp Ser Leu Lys Ile Ser Phe  
20 25 30

Glu Gly Tyr Lys Thr Lys Asp Met Ile Gly Thr Lys Gly Glu Phe Lys  
35 40 45

Asn Val Glu Tyr Lys Phe Ser Lys Asn Ile Lys Asp Leu Ala Ser Tyr  
50 55 60

Leu Lys Gly Ala Lys Ala Thr Ile Lys Pro Ser Asn Ala Phe Met Gly  
65 70 75 80



Sequence\_Listing\_0088562\_015US0.TXT

Glu Gly Asn Asp Ile Ile Thr Asn Asn Ile Thr Lys Val Phe Phe Pro  
85 90 95

Ala Leu Leu Gly Asp Thr Asp Ile Lys Val Val Phe Gln Asp Val Ile  
100 105 110

Ala Gly Glu Asn Lys Gly Val Ile Ser Ala Lys Ile Thr Met Asp Lys  
115 120 125

Lys Ser Thr Ile Val Pro Leu Thr Tyr Thr Ile Lys Asp Asn Lys Phe  
130 135 140

Glu Ala Lys Gly Gln Leu Asp Leu His Thr Phe Lys Asn Gly Ser Lys  
145 150 155 160

Ala Leu Lys Ala Leu Ser Asp Val Ala Ala Gly His Gly Gly Ile Ser  
165 170 175

Trp Pro Leu Val Asp Ile Ser Phe Asn Ala Asp Leu Ala Glu  
180 185 190

<210> 25

<211> 369

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:25 - Cj1018c)

<400> 25

Met Lys Lys Ser Leu Ile Leu Ala Ser Ile Leu Ser Leu Ser Leu Ser  
1 5 10 15

Ala Ala Glu Val Lys Ile Gly Val Val Leu Pro Leu Ser Gly Ala Thr  
20 25 30

Ala Ala Tyr Gly Gln Ser Ala Leu Glu Gly Ile Lys Leu Ala Asn Ser  
35 40 45

Met Gln Ser Ala Leu Ser Asn Gly Asp Lys Val Ser Leu Ala Ile Ile  
50 55 60

Asp Thr Lys Gly Asp Lys Leu Glu Ser Ser Ser Gly Ala Asn Arg Leu  
65 70 75 80

Val Ser Gln Asp Lys Val Ile Gly Leu Ile Gly Glu Met Val Thr Ala  
85 90 95

Asn Thr Leu Gln Val Met Arg Val Ala Glu Asp Asn Lys Ile Pro Leu  
100 105 110

Sequence\_Listing\_0088562\_015uS0.TXT

Ile Ala Pro Ala Ala Thr Gly Asp Arg Leu Leu Asp Lys Lys Ile Tyr  
115 120 125

Ser Ser Arg Val Cys Phe Met Asp Ser Phe Gln Gly Ser Ser Leu Ala  
130 135 140

Lys Tyr Val Phe Ser Lys Leu Asn Tyr Lys Ser Ala Val Ile Val Val  
145 150 155 160

Asp Gln Ser Thr Asp Tyr Ser Leu Gly Leu Ala Lys Ala Phe Glu Lys  
165 170 175

Gln Tyr Lys Ser Asn Gly Gly Gln Ile Leu Arg Ile Leu Arg Val Asn  
180 185 190

Ser Gly Asp Lys Asp Phe Arg Ala Ile Val Ala Gln Val Lys Ser Leu  
195 200 205

Asn Pro Glu Phe Ile Phe Leu Pro Leu Tyr Tyr Ser Glu Ala Ser Leu  
210 215 220

Phe Ala Arg Gln Ser Lys Leu Ala Gly Leu Asn Ile Pro Met Gly Ser  
225 230 235 240

Ala Asp Gly Val Ala Asp Gln Thr Phe Ile Ser Leu Ala Gly Asp Ala  
245 250 255

Ser Glu Gly Tyr Ile Phe Thr Asp Ser Phe Asp Ala Asn Asn Pro Thr  
260 265 270

Thr Lys Leu Ser Lys Glu Phe Ile Ser Val Tyr Glu Lys Ala Lys Gly  
275 280 285

Thr Lys Glu Val Pro Asn Phe Ser Ala Met Gly Ala Asp Ala Tyr Phe  
290 295 300

Val Met Leu Asn Ala Met Asn Ala Cys Val Glu Asn Leu Thr Ser Lys  
305 310 315 320

Cys Val Asn Glu Lys Ile His Gln Thr Lys Asn Tyr Gln Gly Val Ser  
325 330 335

Gly Val Ile Ser Ile Asp Gln Thr Gly Asn Ala Thr Arg Ser Val Val  
340 345 350

Val Lys Glu Ile Lys Asn Gln Lys Gln Asn Tyr Lys Asp Ile Ile Asn  
355 360 365

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Pro

<210> 26  
 <211> 371  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:26 - Cj1019c)

<400> 26

Met Lys Lys Leu Thr Leu Thr Leu Ser Val Leu Thr Met Val Asn Cys  
 1 5 10 15

Leu Tyr Ala Lys Asp Ile Asn Ile Gly Val Val Leu Pro Leu Thr Gly  
 20 25 30

Thr Val Ala Ala Tyr Gly Gln Asp Val Phe Asn Gly Ile Glu Leu Ala  
 35 40 45

Asn Lys Leu Gln Pro Lys Leu Ser Asn Gly Asp Val Ile Lys Leu Ile  
 50 55 60

Thr Ile Asp Thr Lys Gly Asp Lys Leu Glu Thr Ser Asn Gly Val Asn  
 65 70 75 80

Arg Leu Ile Ala Thr Asp Lys Val Leu Gly Ile Ile Gly Glu Ala Thr  
 85 90 95

Thr Pro Asn Thr Ile Gln Ala Ile Ser Ile Ala Glu Glu Lys Lys Ile  
 100 105 110

Pro Leu Ile Ala Pro Val Ala Ser Gly Asp Lys Leu Leu Asp Lys Lys  
 115 120 125

Lys Tyr Ala Ser Arg Val Cys Phe Lys Asp Ser Phe Gln Gly Asp Lys  
 130 135 140

Phe Ala Thr Tyr Val Ser Lys Asp Leu Gly Leu Lys Asn Ala Val Ile  
 145 150 155 160

Ile Ile Asp Gln Ser Asn Val Tyr Ser Leu Gly Leu Ala Arg Ala Phe  
 165 170 175

Glu Asn Ser Phe Lys Asn Asn Gly Gly Lys Ile Ile Lys Lys Leu Val  
 180 185 190

Ile Asn Ser Gly Asp Lys Asp Phe Arg Ala Val Val Ser Gln Leu Lys  
 195 200 205

Ser Leu Asn Pro Asp Phe Val Tyr Met Pro Ile Tyr His Pro Glu Ala

210

Ala Leu Ile Ala Arg Gln Ala Arg Gln Ile Gly Phe Asp Lys Leu Leu  
225 230 235 240

Val Ala Gly Asp Gly Val Asn Asn Gln Thr Phe Ile Asp Leu Gly Gly  
245 250 255

Ser Ala Val Asn Gly Val Ile Phe Thr Asp Ser Phe Asp Tyr Asn Ser  
260 265 270

Pro Ser Thr Gln Leu Gly Lys Asp Phe Val Ala Ala Tyr Glu Lys Val  
275 280 285

Lys Gly Thr Lys Glu Leu Pro Ala Phe Ser Ala Met Gly Ala Asp Ala  
290 295 300

Tyr Phe Val Met Leu Asn Ala Met Asn Ala Cys Val Asp Asn Leu Ser  
305 310 315 320

Ser Glu Cys Ile Asn Ser Lys Ile His Gln Thr Lys Asp Phe Gln Ala  
325 330 335

Val Gly Gly Val Ile Ser Ile Asp Glu Ser Gly Asn Ala Ile Arg Ser  
340 345 350

Val Val Ile Lys Glu Ile Gln Asn Gln Lys Gln Asn Tyr Lys Thr Ile  
355 360 365

Ile Asn Pro  
370

<210> 27

<211> 283

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:27 - Cj1041c)

<400> 27

Met Lys Lys Tyr Val Leu Ser Leu Ala Leu Leu Gly Ser Leu Leu Gly  
1 5 10 15

Ala Ser Glu Leu Lys Tyr Gln Glu Phe Asp Gly Phe Lys Ser Pro Glu  
20 25 30

Ser Ile Phe Val Asp Lys Asn Tyr Val Tyr Val Ser Asn Val Gly Glu  
35 40 45

Lys Leu Glu Pro Leu Ala Lys Asp Asn Asp Gly Phe Ile Ser Lys Leu  
50 55 60

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Asp Lys Asn Gly Lys Val Leu Glu Tyr Lys Phe Leu Thr His Leu Asn
65      70      75
Ala Pro Lys Gly Met Met Glu Ile Gly Lys Thr Leu Tyr Val Val Asp
85      90      95
Ile Asp Val Leu Arg Gly Phe Asp Leu Lys Thr Lys Lys Glu Ile Phe
100     105     110
Asn Leu Pro Ile Lys Gly Ala Ile Phe Leu Asn Asp Ile Glu Lys Leu
115     120     125
Asp Asp Asn Thr Leu Leu Val Ser Asp Thr Gly Thr Gly Leu Ile Leu
130     135     140
Lys Val Asp Leu Lys Thr Lys Gln Tyr Asp Glu Leu Leu Lys Leu Asp
145     150     155     160
Leu Ala Lys Phe Gly Gly Pro Asn Gly Leu Tyr Leu Asp Arg Lys Lys
165     170     175
His Lys Leu Phe Ile Ala Gly Tyr His Pro Asp Gly Val Ser Gly Gly
180     185     190
Val Val Met Ala Tyr Asp Leu Asn Thr Lys Glu Leu Ser Ile Ile Lys
195     200     205
Asn Glu Lys Glu Ser Tyr Asp Gly Ile Val Pro Tyr Lys Asp Gly Leu
210     215     220
Leu Val Ser Ser Trp Gly Asn Asn Leu Asn Gly Tyr Ile Tyr Asn Leu
225     230     235     240
Asp Asn Val Lys Ser Val Lys Leu Glu Leu Pro Leu Met Lys Gly Pro
245     250     255
Ala Asp Ile Phe Ile Glu Gly Asn Ile Leu Trp Ile Pro Lys Met Val
260     265     270
Glu Gly Lys Ile Phe Lys Val Glu Leu Asn Lys
275     280

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<210> 28
<211> 100
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:28 - Cj1153)
<400> 28

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Sequence\_Listing\_0088562\_015US0.TXT

Met Lys Lys Leu Leu Val Val Ser Ala Leu Ala Cys Leu Gly Val Ser  
1 5 10 15

Ala Phe Ala Ala Asp Gly Ala Thr Leu Phe Lys Lys Cys Ala Val Cys  
20 25 30

His Gly Ala Asn Ala Asp Lys Val Tyr Leu Asn Lys Val Pro Ala Leu  
35 40 45

Lys Thr Leu Ser Ser Ala Glu Arg Leu Gln Tyr Met Lys Glu Tyr Ser  
50 55 60

Glu Gly Lys Arg Asn Ala Tyr Gly Gln Gly Ala Ile Met Lys Leu Asn  
65 70 75 80

Leu Lys Gly Leu Thr Glu Glu Asp Phe Lys Ala Ile Glu Ala His Ile  
85 90 95

Glu Thr Leu Lys  
100

<210> 29

<211> 241

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:29 - Cj1214c)

<400> 29

Met Phe Lys Thr Ile Val Cys Phe Leu Ala Leu Asn Leu Ser Leu Phe  
1 5 10 15

Ala Val Gly Phe Asp Leu Lys Pro Ile Lys Ser Glu Leu Val Lys Val  
20 25 30

Asp Asp Ile Tyr Gly Tyr Ile Lys Asp Ser Asp Asp Ile Lys Leu Tyr  
35 40 45

Ser Ser Gly Val Val Val Gln His Phe Ser Asn Ser Gln Ser Ile Ile  
50 55 60

Ala Arg Ala Ser Val Ile Asp Lys Lys Asn Gly Leu Ala Lys Leu Glu  
65 70 75 80

Phe Ser Val Phe Ser Ala Leu Lys Gln Asp Ala Leu Pro Leu Pro Asn  
85 90 95

Val Leu Pro Lys Val Gly Asp Glu Val Val Leu Asn Phe Leu Tyr Asp  
100 105 110

Sequence\_Listing\_0088562\_015uS0.TXT

Arg Gly Leu Val Ile Ala Pro Asp Glu Gln Thr Tyr Asn Glu Leu Val  
115 120 125

Arg Glu Phe Pro Gln Ile Tyr Phe Thr His Ile Asp Ile Phe Gly Ala  
130 135 140

Gln Leu Ile Arg Thr Ala Thr Leu Ser Pro Lys Arg Ser Asp Phe Arg  
145 150 155 160

Gln Phe Cys Asp Asp Asn Ala Val Gly Ile Leu Val Val Ala Leu Glu  
165 170 175

Asn His Ala Glu Val Val Asp Cys Gln Asp Phe Asn Lys Leu Tyr Glu  
180 185 190

Val Pro Ile Ser Lys Pro Thr Ser Val Gln Val Pro Phe Tyr Ser Arg  
195 200 205

Ile Gly Gly Tyr Lys Ser Asn Phe Phe Asp Phe Asn Ser Gln Glu Ile  
210 215 220

Gly Asn Tyr Tyr Arg Tyr Tyr Asp Ala Leu Ile Asn Leu Pro Lys Val  
225 230 235 240

Gln

<210> 30

<211> 411

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:30 - Cj1287c)

<400> 30

Met Asn Leu Lys Glu Glu Ala Leu Lys Tyr His Leu Gly Gly Lys Ile  
1 5 10 15

Asp Ile Val Pro Ser Lys Pro Met Ala Thr Ser Tyr Asp Leu Ser Leu  
20 25 30

Ala Tyr Ser Pro Gly Val Ala Glu Pro Cys Leu Glu Ile Ala Lys Asp  
35 40 45

Asn Glu Leu Ala Tyr Thr Tyr Thr Asn Lys Ala Asn Leu Val Ala Ile  
50 55 60

Val Ser Asp Gly Ser Ala Val Leu Gly Leu Gly Asn Ile Gly Ala Gln  
65 70 75 80

Ala Ser Lys Pro Val Met Glu Gly Lys Ala Cys Leu Phe Lys Lys Phe

Ala Asn Val Asn Ala Tyr Asp Ile Glu Ile Asn Val His Ser Ile Glu  
 100 105 110  
 Glu Ile Val Asn Phe Cys Lys Ala Leu Ala Pro Thr Val Gly Gly Ile  
 115 120 125  
 Asn Leu Glu Asp Ile Ala Ala Pro Lys Cys Phe Glu Ile Glu Ala Ala  
 130 135 140  
 Leu Gln Asp Leu Gly Ile Pro Val Met His Asp Asp Gln His Gly Thr  
 145 150 155 160  
 Ala Ile Ile Ser Thr Ala Gly Leu Met Asn Ala Met Glu Ile Ser Gly  
 165 170 175  
 Lys Lys Phe Lys Asp Ile Lys Val Val Val Ser Gly Ala Gly Ala Ala  
 180 185 190  
 Gly Ile Ala Ser Ala Lys Met Tyr Arg Asn Leu Gly Val Glu Asn Ile  
 195 200 205  
 Ile Leu Val Asp Ser Lys Gly Val Ile Ser Lys Asp Arg Asn Asp Leu  
 210 215 220  
 Thr Pro Gln Lys Leu Glu Phe Ala Val Asp Ser Lys Glu Lys Thr Leu  
 225 230 235 240  
 Lys Glu Val Leu Lys Gly Ala Asp Val Phe Leu Gly Leu Ser Ala Pro  
 245 250 255  
 Lys Ile Leu Asp Asp Glu Met Val Leu Ser Met Ala Lys Asp Pro Val  
 260 265 270  
 Ile Phe Ala Leu Ala Asn Pro Ile Pro Glu Val Met Pro Glu Asp Val  
 275 280 285  
 Ala Arg Leu Arg Lys Asp Ala Ile Val Gly Thr Gly Arg Ser Asp Tyr  
 290 295 300  
 Pro Asn Gln Ile Asn Asn Val Leu Gly Phe Pro Phe Ile Phe Arg Gly  
 305 310 315 320  
 Ala Leu Asp Val Arg Ala Ser Lys Ile Thr Glu Asn Met Lys Val Ala  
 325 330 335  
 Ala Ala Lys Ala Leu Ala Asp Leu Ala Lys Leu Pro Val Ser Asp Ala



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340

345

350

Val Lys Lys Ala Tyr Asn Leu Ser Thr Leu Glu Phe Gly Arg Asp Tyr  
 355 360 365

Val Ile Pro Lys Pro Phe Asp Glu Arg Val Lys Ala Ala Val Ser Thr  
 370 375 380

Ala Val Ala Ala Ala Ala Val Lys Asp Gly Val Ala Lys Val Lys Asn  
 385 390 395 400

Phe Asp Glu Lys Ala Tyr Phe Glu Ser Leu Lys  
 405 410

<210> 31

<211> 236

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:31 - Cj1380)

<400> 31

Met Lys Lys Leu Ser Leu Ile Leu Val Cys Ser Ala Ser Leu Phe Ala  
 1 5 10 15

Ala Ser Asn Ser Glu Ile Ser Asp Phe Tyr Ser Lys Ser Ile Lys Ala  
 20 25 30

Gln Phe Pro Asn Ala Thr Val Ser Val Ser Asn Arg Gln Lys Val Gly  
 35 40 45

Asn Thr Gly Phe Glu Ser Val Ile Val Ser Val Glu Leu Asn Gly Gln  
 50 55 60

Lys Gln Glu Asn Ile Leu Phe Thr Lys Asp Ser Leu Ile Thr Pro Asp  
 65 70 75 80

Leu Ile Asp Leu Lys Thr Gly Ile Ser Tyr Ala Gln Glu Tyr Glu Met  
 85 90 95

Lys Lys Phe Gln Glu Ala Arg Glu Asn Phe Thr Lys Asn Ala Lys Ala  
 100 105 110

Val Ala Gln Lys Glu Thr Met Val Ile Ala Leu Gly Asp Lys Asn Lys  
 115 120 125

Pro Ala Ile Tyr Val Phe Ser Asp Pro Glu Cys Pro Tyr Cys Arg Glu  
 130 135 140

His Leu Ala Gln Ile Asp Asp Glu Leu Lys Asn Tyr Gln Val Asn Tyr  
 145 150 155 160

Sequence\_Listing\_0088562\_015uS0.TXT

Ile Leu Thr Pro Val His Gly Lys Ser Ala Phe Glu Lys Ser Ala Leu  
165 170 175

Ile Tyr Lys Glu Ala Lys Lys Ala Lys Asn Asp Lys Glu Lys Ile Ala  
180 185 190

Ile Leu Asn Lys Tyr Tyr Asp Ala Asn Ile Lys Asn Tyr Pro Lys Val  
195 200 205

Ser Asp Ala Glu Leu Lys Glu Val Phe Ser Leu Tyr Glu Lys Tyr Arg  
210 215 220

Ser Leu Gly Leu Ser Ala Thr Pro Thr Ile Ile Lys  
225 230 235

<210> 32

<211> 172

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:32 - Cj1496c)

<400> 32

Met Ile Lys Lys Phe Ile Leu Leu Val Phe Ile Ser Ser Val Val Phe  
1 5 10 15

Gly Ala Glu Gln Asp Cys Glu Gln Tyr Phe Glu Ala Arg Lys Ala Gln  
20 25 30

Ile Glu Leu Gln Thr Arg Glu Phe Asp Glu Ala Arg Gln Ser Leu Glu  
35 40 45

Ala Tyr Lys Ala Ser Phe Glu Ala Leu Gln Lys Glu Arg Leu Glu Asn  
50 55 60

Leu Glu Lys Lys Glu Ala Glu Val Asn Ala Thr Leu Ala Lys Ile Glu  
65 70 75 80

Glu Leu Lys Leu Glu Asn Ala Arg Leu Val Glu Glu Gln Gln Lys Ile  
85 90 95

Leu Asn Ser Ile Asn Asp Lys Thr Gln Gly Arg Val Lys Glu Ile Tyr  
100 105 110

Ser Gln Met Lys Asp Ala Ala Ile Ala Asp Val Leu Ser Gln Met Asp  
115 120 125

Ala Glu Asp Ala Ser Lys Ile Met Leu Ser Leu Glu Ser Arg Lys Ile  
130 135 140

Sequence\_Listing\_0088562\_015uS0.TXT

Ser Gly Val Leu Ser Lys Met Asp Pro Lys Lys Ala Ser Glu Leu Thr  
145 150 155 160

Leu Leu Leu Lys Asn Leu Asp Asn Asn Ala Ser Asn  
165 170

<210> 33  
<211> 513  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:33 - Cj1516)

<400> 33

Met Asn Arg Arg Asn Phe Leu Lys Phe Asn Ala Leu Thr Leu Ala Ser  
1 5 10 15

Met Gly Val Ala Tyr Ala Asn Pro Met His Asp Met His Ser Met His  
20 25 30

Lys Asn His Ser Ile Asn His Asp Leu Asp Thr Ser Phe Ile Asn Phe  
35 40 45

Ala Pro Lys Asn Leu Lys Leu Leu Asp Pro Lys Gln Phe Pro Gln Gly  
50 55 60

Glu Ile Leu Lys Ala Leu Pro Leu Leu Lys Asn Glu Ser Lys Glu Lys  
65 70 75 80

Asn Ile Phe Arg Ala Thr Leu Glu Ile Lys Glu Asn His Ile Glu Leu  
85 90 95

Ile Lys Gly Lys Lys Thr Leu Phe Tyr Thr Tyr Asn Gly Leu Val Pro  
100 105 110

Ala Pro Lys Ile Glu Val Phe Glu Gly Asp Lys Leu Glu Ile Leu Val  
115 120 125

Lys Asn Lys Leu Lys Glu Ala Thr Thr Ile His Trp His Gly Val Pro  
130 135 140

Val Pro Pro Asp Gln Asp Gly Ser Pro His Asp Pro Ile Leu Ala Gly  
145 150 155 160

Glu Glu Arg Ile Tyr Arg Phe Glu Ile Pro Gln Asp Ser Ala Gly Thr  
165 170 175

Tyr Trp Tyr His Pro His Pro His Tyr Thr Ala Ser Lys Gln Val Phe  
180 185 190

## Sequence\_Listing\_0088562\_015uS0.TXT

Met Gly Leu Ala Gly Ala Phe Val Ile Lys Ala Lys Lys Asp Ala Leu  
 195 200 205  
 Ser His Leu Lys Glu Lys Asp Leu Met Ile Ser Asp Leu Arg Leu Asp  
 210 215  
 Glu Asn Ala Gln Ile Pro Asn Asn Asn Leu Asn Asp Trp Leu Asn Gly  
 225 230 235 240  
 Arg Glu Gly Glu Phe Val Leu Ile Asn Gly Gln Phe Lys Pro Lys Ile  
 245 250 255  
 Lys Leu Ala Thr Asn Glu Arg Ile Arg Ile Tyr Asn Ala Thr Ala Ala  
 260 265 270  
 Arg Tyr Leu Asn Leu Arg Ile Gln Gly Ala Lys Phe Ile Leu Val Gly  
 275 280 285  
 Thr Asp Gly Gly Leu Ile Glu Lys Ala Ile Tyr Lys Glu Glu Leu Phe  
 290 295 300  
 Leu Ser Pro Ala Ser Arg Val Glu Val Leu Ile Asp Ala Pro Lys Asp  
 305 310 315 320  
 Gly Asn Phe Lys Leu Glu Ser Ala Tyr Tyr Asp Arg Asp Lys Met Met  
 325 330 335  
 Val Lys Glu Glu Ser Asn Thr Leu Phe Leu Ala Asn Ile Asn Leu Lys  
 340 345 350  
 Lys Glu Lys Leu Glu Leu Pro Lys Asn Leu Lys Ile Phe Lys Pro Leu  
 355 360 365  
 Glu Glu Pro Lys Glu Phe Lys Glu Ile Ile Met Ser Glu Asp His Met  
 370 375 380  
 Gln Met His Gly Met Met Gly Lys Ser Glu Asn Glu Leu Lys Ile Ala  
 385 390 395 400  
 Leu Ala Ser Met Phe Leu Ile Asn Gly Lys Ser Tyr Asp Leu Lys Arg  
 405 410 415  
 Ile Asp Leu Ser Ser Lys Leu Gly Val Val Glu Asp Trp Ile Val Ile  
 420 425 430  
 Asn Lys Ser His Met Asp His Pro Phe His Ile His Gly Thr Gln Phe  
 435 440 445

Sequence\_Listing\_0088562\_015uS0.TXT

Glu Leu Ile Ser Ser Lys Leu Asn Gly Lys Val Gln Lys Ala Glu Phe  
450 455 460

Arg Ala Phe Arg Asp Thr Ile Asn Val Arg Pro Asn Glu Glu Leu Arg  
465 470 475 480

Leu Lys Met Lys Gln Asp Phe Lys Gly Leu Arg Met Tyr His Cys His  
485 490 495

Ile Leu Glu His Glu Asp Leu Gly Met Met Gly Asn Leu Glu Val Lys  
500 505 510

Glu

<210> 34

<211> 269

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:34 - Cj1540)

<400> 34

Met Lys Lys Ile Ile Ser Leu Ala Leu Ala Leu Ser Ala Ser  
1 5 10 15

Ala Ala Glu Leu Lys Met Ala Thr Thr Thr Ser Thr Asp Asn Thr Gly  
20 25 30

Leu Leu Asp Ala Leu Lys Pro Leu Tyr Glu Lys Glu Ser Gly Asn Thr  
35 40 45

Leu Lys Trp Val Ala Val Gly Thr Gly Ala Ala Leu Lys Met Gly Glu  
50 55 60

Asp Cys Asn Ala Asp Val Leu Phe Val His Ser Pro Lys Ala Glu Lys  
65 70 75 80

Glu Phe Met Lys Lys Gly Phe Gly Val Asp Arg Thr Pro Val Met Tyr  
85 90 95

Asn Asp Phe Ile Ile Ile Ala Asp Lys Ser Leu Ala Ser Lys Phe Lys  
100 105 110

Gly Lys Asn Leu Lys Glu Ser Leu Glu Leu Ile Lys Asn Glu Lys Leu  
115 120 125

Thr Phe Ile Ser Arg Gly Asp Lys Ser Gly Thr Asp Asn Lys Glu Lys  
130 135 140

Ser Leu Trp Lys Asn Leu Gly Gly Val Pro Glu Lys Gln Ser Trp Tyr

Sequence\_Listing\_0088562\_015US0.TXT

145 150 155 160

Gln Gln Ser Gly Gln Gly Met Leu Ala Ser Ile Lys Ile Ala Glu Glu  
165 170 175

Lys Lys Gly Val Ile Leu Thr Asp Arg Gly Thr Tyr Ile Lys Tyr Glu  
180 185 190

Ala Asn Glu Lys Gly Lys Pro Asn Leu Val Ile Val Asn Glu Gly Asp  
195 200 205

Asp Ser Leu Lys Asn Phe Tyr Ser Val Ile Ala Thr Asn Pro Lys His  
210 215 220

Cys Lys Asn Val Asn Tyr Thr Glu Ala Ser Lys Phe Ile Lys Trp Val  
225 230 235 240

Thr Ser Asp Lys Thr Leu Asn Phe Ile Ala Asp Phe Lys Leu Leu Asn  
245 250 255

Lys Pro Leu Phe Val Ile Asp Ala Lys Thr Arg Lys Asp  
260 265

<210> 35  
<211> 179  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:35 - Cj1659)

<400> 35

Met Ile Lys Lys Val Leu Ser Val Val Ala Ala Ala Ala Val Ile Ser  
1 5 10 15

Thr Asn Leu Phe Ala Gly Glu Val Pro Ile Gly Asp Pro Lys Glu Leu  
20 25 30

Asn Gly Met Glu Ile Ala Ala Val Tyr Leu Gln Pro Ile Glu Met Glu  
35 40 45

Pro Arg Gly Ile Asp Leu Ala Ala Ser Leu Ala Asp Ile His Leu Glu  
50 55 60

Ala Asp Ile His Ala Leu Lys Asn Asn Pro Asn Gly Phe Pro Glu Gly  
65 70 75 80

Phe Trp Met Pro Tyr Leu Thr Ile Ala Tyr Glu Leu Lys Asn Thr Asp  
85 90 95

Thr Gly Ala Ile Lys Arg Gly Thr Leu Met Pro Met Val Ala Asp Asp  
100 105 110

Sequence\_Listing\_0088562\_015U0.TXT

Gly Pro His Tyr Gly Ala Asn Ile Ala Met Glu Lys Asp Lys Lys Gly  
115 120

Gly Phe Gly Val Gly Asn Tyr Glu Leu Thr Phe Tyr Ile Ser Asn Pro  
130 135 140

Glu Lys Gln Gly Phe Gly Arg His Val Asp Glu Thr Gly Val Gly  
145 150 155 160

Lys Trp Phe Glu Pro Phe Lys Val Asp Tyr Lys Phe Lys Tyr Thr Gly  
165 170 175

Thr Pro Lys

<210> 36

<211> 364

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:36 - Cj1643)

<400> 36

Met Lys Lys Ile Leu Ile Ile Cys Met Leu Phe Thr Leu Ser Phe Gly  
1 5 10 15

Ile Glu Arg Pro Lys Phe Glu Asp Phe Leu Ala Gly Tyr Glu Arg Asn  
20 25 30

Lys Ala Ser Met Leu Asn Tyr Glu Gly Met Pro Ala Phe Ala Leu Ser  
35 40 45

Glu Asn Leu Leu Ala Val Leu Lys Gln Pro Asn Ala Lys Leu Asn Lys  
50 55 60

Tyr Val Lys Tyr Asp Pro Phe Leu Asn Leu Tyr Leu Val Arg Thr Asp  
65 70 75 80

Phe Ser Leu Ile Pro Thr Pro Met Gly Asp Glu Glu Lys Leu Thr Arg  
85 90 95

Asn Asp Trp Val Gly Ile Trp Asp Pro Asn Lys Pro Tyr Ile Gly His  
100 105 110

Ile Lys Tyr Leu Ala Gln Asn Ile Asp Glu Lys Asp Gln Leu Asp Phe  
115 120 125

Asn Ser Lys Ile Gly Leu Leu Gly Thr Pro Cys Cys Glu Met Met Gly  
130 135 140

Sequence\_Listing\_0088562\_015uS0.TXT

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Ile Ala Leu Asn Asn Ser Ser Phe Ile Gly Asn Arg Tyr Leu Lys His
145                      150                      155                      160

Phe Met Lys Tyr Asn Asp Val Tyr Trp Gly Asp Ile Gly Val Asp Phe
                      165                      170                      175

Val Val Arg Glu Asn Lys Ile Tyr Val Asn Asn Val Arg Lys Asn Pro
180                      185                      190

Gln Phe Leu Ile Asn Asp Gln Val Ile Ser Val Asp Gly Leu Pro Ala
195                      200                      205

Asn Asp Leu Arg Lys Leu Asn Glu Lys Ile Leu Phe Ala Asp Arg Gly
210                      215                      220

Ser Thr Leu Tyr Phe Gln Val Leu Arg Asp Asn Met Asp Leu Asn Ile
225                      230                      235                      240

Ser Thr Glu Val Phe Ala Lys Asp Leu Ser Lys Phe Asn Leu Pro Asp
245                      250                      255

Ser Lys Pro Lys Pro Lys Ile Thr Asn Phe Thr Ser Asn Leu Gly Leu
260                      265                      270

Thr Val Asn Ala Ser Leu Val Val Thr Lys Ile Asp Pro Lys Ser Lys
275                      280                      285

Val Ser Asn Ala Gly Phe Met Val Gly Asp Lys Ile Leu Arg Val Asn
290                      295                      300

Asn Ile Ile Leu Asn Asn Phe Lys Glu Leu Gln Asn Ile Leu Ser Ala
305                      310                      315                      320

Gly Asn Asp Phe Ser Ile Leu Ile Glu Arg Lys Ser Thr Lys Leu Pro
325                      330                      335

Leu Ser Asn Phe Asn Asn Glu Leu Gly Gly Asn Ala Asn Ser Gly Gly
340                      345                      350

Asp Gly Lys Phe Gln Phe Phe Ile Arg Leu Thr Lys
355                      360

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<210> 37
<211> 501
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:37 - Cj0105)

<400> 37

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Sequence\_Listing\_0088562\_015uS0.TXT

Met Lys Phe Lys Ala Asp Glu Ile Ser Ser Ile Ile Lys Glu Arg Ile  
1 5 10

Glu Asn Phe Asp Leu Asn Leu Glu Ile Glu Glu Thr Gly Lys Ile Ile  
20 25 30

Ser Val Ala Asp Gly Val Ala Lys Val Tyr Gly Leu Lys Asn Ile Met  
35 40 45

Ala Gly Glu Met Val Glu Phe Glu Asn Gly Asp Lys Gly Met Ala Leu  
50 55 60

Asn Leu Glu Glu Ser Ser Val Gly Ile Val Ile Leu Gly Lys Gly Glu  
65 70 75 80

Gly Leu Lys Glu Gly Ala Ser Val Lys Arg Leu Lys Lys Leu Leu Lys  
85 90 95

Val Pro Val Gly Glu Ala Leu Ile Gly Arg Val Val Asn Ala Leu Gly  
100 105 110

Glu Pro Ile Asp Ala Lys Gly Val Ile Asn Ala Asn Glu Tyr Arg Phe  
115 120 125

Val Glu Glu Lys Ala Lys Gly Ile Met Ala Arg Lys Ser Val His Glu  
130 135 140

Pro Leu His Thr Gly Ile Lys Ala Ile Asp Ala Leu Val Pro Ile Gly  
145 150 155 160

Arg Gly Gln Arg Glu Leu Ile Ile Gly Asp Arg Gln Thr Gly Lys Thr  
165 170 175

Thr Val Ala Val Asp Thr Ile Ile Ser Gln Arg Gly Gln Gly Val Ile  
180 185 190

Cys Ile Tyr Val Ala Ile Gly Gln Lys Gln Ser Thr Val Ala Gln Val  
195 200 205

Val Lys Arg Leu Glu Glu His Gly Ala Met Glu Tyr Thr Ile Val Val  
210 215 220

Asn Ala Gly Ala Ser Asp Pro Ala Ala Leu Gln Tyr Leu Ala Pro Tyr  
225 230 235 240

Thr Gly Val Thr Met Gly Glu Phe Phe Arg Asp Asn Ala Lys His Ala  
245 250 255

Sequence\_Listing\_0088562\_015uS0.TXT

Leu Ile Val Tyr Asp Asp Leu Ser Lys His Ala Val Ala Tyr Arg Glu  
260 265 270

Met Ser Leu Ile Leu Arg Arg Pro Pro Gly Arg Glu Ala Tyr Pro Gly  
275 280 285

Asp Val Phe Tyr Leu His Ser Arg Leu Leu Glu Arg Ala Ser Lys Leu  
290 295 300

Asn Asp Glu Leu Gly Ala Gly Ser Leu Thr Ala Leu Pro Ile Ile Glu  
305 310 315 320

Thr Gln Ala Gly Asp Val Ser Ala Tyr Ile Pro Thr Asn Val Ile Ser  
325 330 335

Ile Thr Asp Gly Gln Ile Phe Leu Glu Thr Asp Leu Phe Asn Ser Gly  
340 345 350

Ile Arg Pro Ala Ile Asn Val Gly Leu Ser Val Ser Arg Val Gly Gly  
355 360 365

Ala Ala Gln Ile Lys Ala Thr Lys Gln Val Ser Gly Thr Leu Arg Leu  
370 375 380

Asp Leu Ala Gln Tyr Arg Glu Leu Gln Ala Phe Ala Gln Phe Ala Ser  
385 390 395 400

Asp Leu Asp Glu Ala Ser Arg Lys Gln Leu Glu Arg Gly Gln Arg Met  
405 410 415

Val Glu Leu Leu Lys Gln Pro Pro Tyr Ser Pro Leu Ser Val Glu Lys  
420 425 430

Gln Val Val Leu Ile Phe Ala Gly Thr Lys Gly Phe Leu Asp Asp Ile  
435 440 445

Ala Val Ser Arg Ile Lys Glu Phe Glu Asp Gly Ile Tyr Pro Phe Ile  
450 455 460

Glu Ala Lys His Pro Asp Ile Phe Glu Gln Ile Arg Ser Lys Lys Ala  
465 470 475 480

Leu Asp Ser Asp Leu Glu Glu Lys Leu Ala Lys Ala Ile Asn Glu Phe  
485 490 495

Lys Ala Asn His Leu  
500

Sequence\_Listing\_0088562\_015uS0.TXT

<210> 38  
 <211> 334  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:38 - Cj0175)

<400> 38

Met Lys Lys Ile Phe Phe Met Phe Leu Thr Ala Val Ser Phe Leu Gly  
 1 5 10 15

Ala Ser Glu Leu Asn Ile Tyr Ser Ala Arg His Tyr Asn Ala Asp Phe  
 20 25 30

Glu Ile Ile Lys Lys Phe Glu Glu Lys Thr Gly Ile Lys Val Asn His  
 35 40 45

Thr Gln Ala Lys Ala Ser Glu Leu Ile Lys Arg Leu Ser Leu Glu Gly  
 50 55 60

Ser Asn Ser Pro Ala Asp Ile Phe Ile Thr Ala Asp Ile Ser Asn Leu  
 65 70 75 80

Thr Glu Ala Lys Asn Leu Gly Leu Leu Ser Pro Val Ser Ser Lys Tyr  
 85 90 95

Leu Glu Glu Phe Ile Pro Ala His Leu Arg Asp Lys Asp Lys Glu Trp  
 100 105 110

Phe Ala Ile Thr Lys Arg Ala Arg Ile Ile Ala Tyr Asn Lys Asn Thr  
 115 120 125

Asn Ile Asp Ile Ser Lys Met Lys Asn Tyr Glu Asp Leu Ala Lys Ala  
 130 135 140

Glu Phe Lys Gly Glu Ile Val Met Arg Ser Ala Thr Ala Pro Tyr Ser  
 145 150 155 160

Lys Thr Leu Leu Ala Ser Ile Ile Ala Asn Asp Gly Asn Lys Glu Ala  
 165 170 175

Lys Ala Trp Ala Lys Gly Val Leu Glu Asn Leu Ala Thr Asn Pro Lys  
 180 185 190

Gly Gly Asp Arg Asp Gln Ala Arg Gln Val Phe Ala Gly Glu Ala Lys  
 195 200 205

Phe Ala Val Met Asn Thr Tyr Tyr Ile Gly Leu Leu Lys Asn Ser Lys  
 210 215 220

Asn Pro Lys Asp Val Glu Val Gly Asn Ser Leu Gly Ile Ile Phe Pro

## Sequence\_Listing\_0088562\_015US0.TXT

Sequence\_Listing\_0088562\_015U0.TXT

Lys Ile His Arg Asn Arg Ile Asp Pro Pro Pro Glu Thr Leu Val Lys  
130 135 140

Asp Lys Gly Met Ile Tyr Gly Ile Gly Lys Arg Asp Glu Asn Ile Leu  
145 150 155 160

Thr Ile Leu Lys Val Glu Ala Leu Leu Lys Arg Glu Phe  
165 170

<210> 40

<211> 249

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:40 - Cj0303c)

<400> 40

Met Lys Lys Phe Val Val Phe Phe Gly Ile Leu Leu Phe Val Ser Cys  
1 5 10 15

Leu Asn Ala Gln Asn Leu Ser Ile Phe Val Ala Ser Ser Ala Ser Lys  
20 25 30

Ala Met Ser Glu Val Lys Asp Glu Phe Leu Lys Thr His Pro Glu Asp  
35 40 45

Lys Ile Glu Leu Val Phe Gly Ala Ser Gly Lys Tyr Thr Glu Leu Leu  
50 55 60

Lys Gln Gly Arg Glu Phe Asp Leu Phe Phe Ser Ala Asp Thr Lys Tyr  
65 70 75 80

Ala Lys Ala Ile Tyr Asp Asp Lys Asn Ala Leu Ile Lys Pro Lys Val  
85 90 95

Tyr Val Leu Gly Val Leu Ala Leu Tyr Ser Leu Asp Glu Asn Leu Leu  
100 105 110

Gln Gly Gly Val Glu Asn Leu Lys Glu Lys Ala Asn Lys Ile Thr His  
115 120 125

Leu Ser Ile Ala Asn Pro Lys Val Ala Pro Tyr Gly Val Ala Ala Lys  
130 135 140

Glu Val Leu Glu Asn Leu Gly Leu Asn Glu Leu Leu Lys Asp Lys Ile  
145 150 155 160

Val Leu Gly Glu Asn Ile Ser Val Pro Val Leu His Val Asp Ser Lys  
165 170 175

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Asn Ser Asp Ile Ala Ile Val Ala Tyr Ser Leu Val Ser Ser Ile Asn  
180 185 190

His Pro Lys Gly Lys Ala Val Ile Ile Asp Ala Lys Tyr Phe Ser Pro  
195 200 205

Leu Glu Gln Ser Tyr Val Ile Thr Lys Tyr Ala Lys Asp Lys Lys Leu  
210 215 220

Ala Phe Glu Phe Asn Glu Phe Ile Gly Ser Ser Lys Ala Lys Glu Ile  
225 230 235 240

Phe Lys Lys Tyr Gly Phe Ser Thr Pro  
245

<210> 41  
<211> 198  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:41 - Cj0334)

<400> 41

Met Ile Val Thr Lys Lys Ala Leu Asp Phe Thr Ala Pro Ala Val Leu  
1 5 10 15

Gly Asn Asn Glu Ile Val Gln Asp Phe Asn Leu Tyr Lys Asn Ile Gly  
20 25 30

Pro Lys Gly Ala Val Val Phe Phe Tyr Pro Lys Asp Phe Thr Phe Val  
35 40 45

Cys Pro Ser Glu Ile Ile Ala Phe Asp Lys Arg Tyr Gln Glu Phe Lys  
50 55 60

Asn Arg Gly Ile Glu Val Ile Gly Ile Ser Gly Asp Asn Glu Phe Ser  
65 70 75 80

His Phe Ala Trp Lys Asn Thr Pro Val Asn Gln Gly Gly Ile Gly Gln  
85 90 95

Val Lys Phe Pro Leu Val Ala Asp Leu Thr Lys Gln Ile Ala Arg Asn  
100 105 110

Phe Asp Val Leu Tyr Ala Glu Ala Val Ala Leu Arg Gly Ser Phe Leu  
115 120 125

Leu Asp Ala Asp Gly Thr Val Arg His Ala Val Val Asn Asp Leu Pro  
130 135 140

Sequence\_Listing\_0088562\_015uS0.TXT

Leu Gly Arg Asn Ile Asp Glu Met Leu Arg Met Val Asp Thr Met Leu  
145 150 155 160

Phe Thr Asn Glu His Gly Glu Val Cys Pro Ala Gly Trp Asn Lys Gly  
165 170 175

Asp Glu Gly Met Lys Ala Asn Pro Lys Gly Val Ala Glu Tyr Leu Gly  
180 185 190

Lys Asn Glu Ala Lys Leu  
195

<210> 42

<211> 573

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:42 - Cj0415)

<400> 42

Met Ala Glu Val Leu Lys Lys Val Asp Val Val Thr Val Gly Ala Gly  
1 5 10 15

Trp Thr Gly Gly Ile Val Ala Ala Glu Leu Thr Lys Ala Gly Leu Asn  
20 25 30

Val Leu Ser Leu Glu Arg Gly His Met Gln Ser Thr Glu Asn Phe Asn  
35 40 45

Tyr Ile His Asp Glu Trp Arg Tyr Gly Ile Asn Tyr Gly Leu Met Gln  
50 55 60

Asp Cys Ser Lys Asp Thr Val Thr Phe Arg His Asp Pro Ser Gly Leu  
65 70 75 80

Ala Leu Pro Tyr Arg Lys Met Gly Ser Phe Leu Leu Gly Asn Asn Val  
85 90 95

Gly Gly Ala Gly Val His Trp Asn Gly Trp Thr Phe Arg Phe Met Pro  
100 105 110

Tyr Asp Phe Glu Ile Gln Thr Leu Ser Lys Gln Arg Tyr Gly Asn Lys  
115 120 125

Leu Gly Asn Asp Tyr Thr Leu Gln Asp Trp Gly Val Thr Tyr Lys Asp  
130 135 140

Met Glu Pro Tyr Tyr Asp Arg Phe Glu Lys Thr Cys Gly Val Ser Gly  
145 150 155 160

Glu Pro Asn Pro Leu Ala Glu Lys Met Gly Ala Phe Arg Ser Ser Pro

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165

170

175

Tyr Pro Gln Glu Pro Leu Glu Asn Thr Lys Met Leu Lys Arg Phe Glu  
 180 185 190

Ser Ala Ala Lys Ser Ser Asn Leu His Thr Tyr Arg Leu Pro Ala Ser  
 195 200 205

Asn Ser Lys Gly Gly Tyr Thr Asn Pro Asp Gly Gln Asp Leu Ala Pro  
 210 215 220

Cys Gln Tyr Cys Ala Tyr Cys Glu Arg Phe Gly Cys Glu Tyr Gly Ala  
 225 230 235 240

Lys Ala Ser Pro Leu Asn Thr Val Ile Pro Lys Ala Met Ser Thr Gly  
 245 250 255

Lys Tyr Thr Ile Arg Thr Tyr Ser Asn Val Thr Gln Ile Leu Lys Lys  
 260 265 270

Asp Gly Lys Val Thr Gly Val Lys Phe Val Asp Thr Arg Thr Met Lys  
 275 280 285

Glu Tyr Ile Gln Pro Ala Asp Ile Val Val Leu Thr Ser Tyr Met Phe  
 290 295 300

Asn Asn Ala Lys Leu Leu Met Val Ser Asn Ile Gly Glu Gln Tyr Asp  
 305 310 315 320

Pro Lys Thr Gly Lys Gly Thr Leu Gly Arg Asn Tyr Cys Tyr Gln Met  
 325 330 335

Asn Met Gly Thr Thr Ala Phe Phe Asp Glu Gln Phe Asn Thr Phe Met  
 340 345 350

Gly Ser Gly Ala Leu Gly Thr Thr Ser Asp Asp Phe Asn Gly Asp Asn  
 355 360 365

Phe Asp His Ser Lys Glu Lys Phe Leu His Gly Ala Met Ile Tyr Ser  
 370 375 380

Val Gln Leu Gly Thr Arg Pro Ile Gln Ser Ala Pro Leu Pro Ala Gly  
 385 390 395 400

Ala Pro Thr Trp Gly Ala Glu Phe Lys Lys Ala Leu Asn Tyr Asn Phe  
 405 410 415

Thr Arg Ala Ile Thr Val Gly Gly Gln Gly Ala Ser Leu Pro His Lys



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420

425

430

Asn Asn Tyr Leu Ser Leu Asp Pro Thr Tyr Lys Asp Ala Phe Gly Met  
 435 440 445

Pro Leu Leu Arg Leu Thr Tyr Asn Phe Thr Asp Gln Asp Arg Ala Leu  
 450 455 460

His Lys Phe Ile Thr Asp Lys Thr Ala Glu Val Ala Lys Arg Met Gln  
 465 470 475 480

Gly Val Lys Ser Ile Lys Lys Gly Ala Tyr Leu Lys Asp Tyr Ser Val  
 485 490 495

Val Pro Tyr Gln Ser Thr His Asn Thr Gly Gly Thr Thr Met Gly Ala  
 500 505 510

Asp Arg Glu Thr Ser Val Val Asn Thr Tyr Leu Gln His Trp Asp Ala  
 515 520 525

Asp Asn Leu Phe Val Val Gly Ala Gly Asn Phe Gln His Asn Ser Gly  
 530 535 540

Tyr Asn Pro Thr Asp Thr Val Gly Ala Leu Ala Tyr Arg Cys Ala Glu  
 545 550 555 560

Gly Ile Leu Lys Tyr His Lys Ser Gly Lys Ser Leu Ala  
 565 570

&lt;210&gt; 43

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; Campylobacter jejuni (SEQ ID NO:43 - Cj0420)

&lt;220&gt;

&lt;221&gt; MISC\_FEATURE

&lt;222&gt; (70)..(70)

&lt;223&gt; X at position 70 is val or Ala

&lt;220&gt;

&lt;221&gt; MISC\_FEATURE

&lt;222&gt; (136)..(136)

&lt;223&gt; X at position 136 is Ala or Thr

&lt;220&gt;

&lt;221&gt; MISC\_FEATURE

&lt;222&gt; (168)..(168)

&lt;223&gt; X at position 168 is Thr or Ala

&lt;400&gt; 43

Met Lys Lys Val Leu Leu Ser Ser Leu Val Ala Val Ser Leu Leu Ser  
 1 5 10 15

Sequence\_Listing\_0088562\_015uS0.TXT

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Thr Gly Leu Phe Ala Lys Glu Tyr Thr Leu Asp Lys Ala His Thr Asp
      20                      25                      30
Val Gly Phe Lys Ile Lys His Leu Gln Ile Ser Asn Val Lys Gly Asn
      35                      40                      45
Phe Lys Asp Tyr Ser Ala Val Ile Asp Phe Asp Pro Ala Ser Ala Glu
      50                      55                      60
Phe Lys Lys Leu Asp Xaa Thr Ile Lys Ile Ala Ser Val Asn Thr Glu
      65                      70                      75                      80
Asn Gln Thr Arg Asp Asn His Leu Gln Gln Asp Asp Phe Phe Lys Ala
      85                      90                      95
Lys Lys Tyr Pro Asp Met Thr Phe Thr Met Lys Lys Tyr Glu Lys Ile
      100                      105                      110
Asp Asn Glu Lys Gly Lys Met Thr Gly Thr Leu Thr Ile Ala Gly Val
      115                      120                      125
Ser Lys Asp Ile Val Leu Asp Xaa Glu Ile Gly Gly Val Ala Lys Gly
      130                      135                      140
Lys Asp Gly Lys Glu Lys Ile Gly Phe Ser Leu Asn Gly Lys Ile Lys
      145                      150                      155                      160
Arg Ser Asp Phe Lys Phe Ala Xaa Ser Thr Ser Thr Ile Thr Leu Ser
      165                      170                      175
Asp Asp Ile Asn Leu Asn Ile Glu Val Glu Ala Asn Glu Lys
      180                      185                      190

<210> 44
<211> 623
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:44 - Cj0759)

<400> 44
Met Ser Lys Val Ile Gly Ile Asp Leu Gly Thr Thr Asn Ser Cys Val
1      5                      10                      15
Ala Val Tyr Glu Arg Gly Glu Ser Lys Val Ile Pro Asn Lys Glu Gly
      20                      25                      30
Lys Asn Thr Thr Pro Ser Val Val Ala Phe Thr Asp Lys Gly Glu Val
      35                      40                      45

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Leu Val Gly Asp Ser Ala Lys Arg Gln Ala Val Thr Asn Pro Glu Lys  
 50 55 60  
 Thr Ile Tyr Ser Ile Lys Arg Ile Met Gly Leu Met Ile Asn Glu Asp  
 65 70 75 80  
 Ala Ala Lys Glu Ala Lys Asn Arg Leu Pro Tyr His Ile Thr Glu Arg  
 85 90 95  
 Asn Gly Ala Cys Ala Ile Glu Ile Ala Gly Lys Ile Tyr Thr Pro Gln  
 100 105  
 Glu Ile Ser Ala Lys Val Leu Met Lys Leu Lys Glu Asp Ala Glu Ala  
 115 120 125  
 Phe Leu Gly Glu Ser Val Thr Asp Ala Val Ile Thr Val Pro Ala Tyr  
 130 135 140  
 Phe Asn Asp Ala Gln Arg Lys Ala Thr Lys Glu Ala Gly Thr Ile Ala  
 145 150 155 160  
 Gly Leu Asn Val Leu Arg Ile Ile Asn Glu Pro Thr Ser Ala Ala Leu  
 165 170 175  
 Ala Tyr Gly Leu Asp Lys Lys Asp Ser Glu Lys Ile Val Val Tyr Asp  
 180 185 190  
 Leu Gly Gly Gly Thr Phe Asp Val Thr Val Leu Glu Thr Gly Asp Asn  
 195 200 205  
 Val Val Glu Val Leu Ala Thr Gly Gly Asn Ala Phe Leu Gly Gly Asp  
 210 215 220  
 Asp Phe Asp Asn Lys Leu Ile Asp Phe Leu Ala Asn Glu Phe Lys Asp  
 225 230 235 240  
 Glu Thr Gly Ile Asp Leu Lys Asn Asp Val Met Ala Leu Gln Arg Leu  
 245 250 255  
 Lys Glu Ala Ala Glu Asn Ala Lys Lys Glu Leu Ser Ser Ala Asn Glu  
 260 265 270  
 Thr Glu Ile Asn Leu Pro Phe Ile Thr Ala Asp Ala Ser Gly Pro Lys  
 275 280 285  
 His Leu Val Lys Lys Leu Thr Arg Ala Lys Phe Glu Gly Met Ile Asp  
 290 295 300

Sequence\_Listing\_0088562\_015uS0.TXT

Ser Leu Val Ala Glu Thr Ile Thr Lys Ile Asn Glu Val Val Ser Asp  
305 310 315

Ala Gly Leu Lys Lys Asp Glu Ile Lys Glu Ile Val Met Val Gly Gly  
325 330 335

Ser Thr Arg Val Pro Leu Val Gln Glu Glu Val Lys Lys Ala Phe Asn  
340 345 350

Lys Asp Leu Asn Lys Ser Val Asn Pro Asp Glu Val Val Ala Ile Gly  
355 360 365

Ala Ala Ile Gln Gly Ala Val Ile Lys Gly Asp Val Lys Asp Val Leu  
370 375 380

Leu Leu Asp Val Thr Pro Leu Ser Leu Gly Ile Glu Thr Leu Gly Gly  
385 390 395 400

Val Met Thr Lys Ile Ile Glu Lys Gly Thr Thr Ile Pro Thr Lys Lys  
405 410 415

Glu Gln Val Phe Ser Thr Ala Glu Asp Asn Gln Ser Ala Val Thr Ile  
420 425 430

Asn Val Leu Gln Gly Glu Arg Glu Phe Ser Arg Asp Asn Lys Ser Leu  
435 440 445

Gly Asn Phe Asn Leu Glu Gly Ile Pro Pro Ala Pro Arg Gly Met Pro  
450 455 460

Gln Ile Glu Val Thr Phe Asp Ile Asp Ala Asn Gly Ile Leu Thr Val  
465 470 475 480

Ser Ala Lys Asp Lys Ala Thr Gly Lys Ala Gln Glu Ile Lys Ile Thr  
485 490 495

Gly Ser Ser Gly Leu Ser Glu Glu Glu Ile Asn Asn Met Val Lys Asp  
500 505 510

Ala Glu Leu His Lys Glu Glu Asp Lys Lys Arg Lys Glu Ala Val Asp  
515 520 525

Ala Arg Asn Ala Ala Asp Ser Leu Ala His Gln Val Glu Lys Ser Leu  
530 535 540

Ser Glu Leu Gly Glu Lys Val Ala Ala Ala Asp Lys Glu Asn Ile Gln  
545 550 555 560

Sequence\_Listing\_0088562\_015U0.TXT

Lys Ala Leu Asp Asp Leu Arg Glu Thr Leu Lys Asn Gln Asn Ala Ser  
565 570 575

Lys Glu Glu Ile Glu Ser Lys Met Lys Ala Leu Ser Glu Val Ser His  
580 585 590

Lys Leu Ala Glu Asn Met Tyr Lys Lys Asp Glu Pro Asn Thr Ala Asn  
595 600 605

Asp Lys Lys Lys Lys Asp Asp Asp Val Ile Asp Ala Glu Val Glu  
610 615 620

<210> 45

<211> 256

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:45 - Cj0771c)

<400> 45

Met Asn Leu Phe Lys Ile Ile Ile Leu Ala Cys Ile Leu Asn Leu Ser  
1 5 10 15

Ser Leu Phe Ala Gln Asn Ile Thr Ile Gly Ala Thr Pro Asn Pro Phe  
20 25 30

Gly Ser Leu Leu Glu Leu Met Lys Asp Asp Phe Lys Asn Lys Gly Tyr  
35 40 45

Glu Leu Lys Ile Val Glu Phe Ser Asp Tyr Ile Leu Pro Asn Arg Ala  
50 55 60

Leu Glu Glu Lys Glu Leu Asp Ala Asn Leu Tyr Gln His Lys Pro Phe  
65 70 75 80

Leu Glu Glu Tyr Asn Leu Lys Lys Gly Ser Asn Leu Ile Ala Thr Thr  
85 90 95

Pro Val Leu Ile Ala Pro Val Gly Val Tyr Ser Lys Lys Ile Lys Asn  
100 105 110

Leu Glu Asn Leu Lys Glu Gly Ala Arg Val Ala Ile Pro Asn Asp Ala  
115 120 125

Thr Asn Glu Ser Arg Ala Leu Glu Leu Leu Glu Lys Ala Lys Leu Ile  
130 135 140

Glu Leu Asn Lys Asn Thr Leu Lys Thr Pro Leu Asp Ile Asn Lys Asn  
145 150 155 160

Sequence\_Listing\_0088562\_015uS0.TXT

Pro Lys Lys Leu Lys Phe Ile Glu Leu Lys Ala Ala Gln Leu Pro Arg  
165 170 175

Ala Leu Asp Asp Val Asp Ile Ala Ile Ile Asn Ser Asn Phe Ala Leu  
180 185 190

Gly Ala Gly Leu Asn Pro Ser Lys Asp Thr Ile Phe Arg Glu Asp Lys  
195 200 205

Asn Ser Pro Tyr Val Asn Tyr Val Val Val Arg Ser Glu Gly Lys Asn  
210 215 220

Ser Glu Lys Thr Lys Val Ile Asp Glu Ile Leu Arg Ser Asp Lys Phe  
225 230 235 240

Lys Ala Ile Ile Asn Glu His Tyr Lys Asp Ile Leu Ile Pro Ala Phe  
245 250 255

<210> 46

<211> 257

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:46 - Cj0772c)

<400> 46

Met Lys Ile Lys Ser Leu Phe Ile Ala Ser Ile Leu Thr Leu Ser Leu  
1 5 10 15

Asn Ala Asn Ala Leu Glu Thr Ile Thr Val Ala Ala Thr Pro Val Pro  
20 25 30

His Ala Glu Ile Leu Glu Gln Val Lys Pro Asp Leu Glu Lys Gln Gly  
35 40 45

Tyr Lys Leu Glu Ile Lys Glu Phe Thr Asp Tyr Val Leu Pro Asn Leu  
50 55 60

Ala Val Asp Asn Gly Glu Ala Asp Ala Asn Phe Phe Gln His Thr Pro  
65 70 75 80

Tyr Leu Glu Glu Phe Asn Lys Asn Lys Gly Thr Lys Leu Ile Lys Val  
85 90 95

Ala Ala Ile His Ile Glu Pro Met Ala Val Tyr Ser Lys Lys Tyr Lys  
100 105 110

Ser Leu Asp Asp Ile Lys Glu Gly Val Lys Ile Ala Ile Pro Asn Asp  
115 120 125

Pro Thr Asn Glu Ser Arg Ala Leu Asp Ile Ile Ala Lys Lys Gly Leu

130

Val Lys Phe Lys Asp Lys Ala Leu Lys Thr Pro Leu Asp Ile Ile Asp  
145 150 155 160

Asn Pro Lys Lys Ile Lys Phe Val Glu Leu Lys Pro Ala Gln Leu Pro  
165 170 175

Arg Ala Leu Asn Asp Val Asp Phe Ala Val Ile Asn Ser Asn Tyr Ala  
180 185 190

Leu Ser Ala Asn Leu Asn Pro Ala Lys Asp Ser Val Phe Ile Glu Asp  
195 200 205

Lys Glu Ser Pro Tyr Ala Asn Ile Leu Val Val Arg Val Gly His Glu  
210 215 220

Asn Asp Pro Lys Ile Lys Ala Leu Ile Gln Ala Leu Gln Ser Asp Lys  
225 230 235 240

Ile Lys Gln Phe Ile Ile Glu Lys Tyr Asn Gly Ser Val Leu Pro Ala  
245 250 255

Phe

<210> 47  
<211> 213  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:47 - Cj0872)  
<400> 47

Met Arg Asn Phe Phe Cys Lys Phe Val Leu Ala Leu Val Phe Tyr Ser  
1 5 10 15

Ser Phe Ala Leu Ala Asn Asn Ser Phe Ile Thr Leu Asn Pro Ser Leu  
20 25 30

Pro Ser Ser Glu Asn Ser Val Ile Glu Ala Phe Ser Tyr Lys Cys Ile  
35 40 45

His Cys Tyr Asn His His Lys Phe Gly Thr Leu Glu Lys Leu Arg Glu  
50 55 60

Ala Phe Pro Asn Leu His Phe Lys Leu Tyr Pro Val Ser Leu Met Asn  
65 70 75 80

Gly Glu Phe Ser Lys Glu Met Asn Glu Leu Phe Thr Phe Ala Gln Tyr  
85 90 95

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Lys Asp Glu Gln Asn Gly Lys Asp Ala Ser Tyr Ser Asp Ser Leu Ser  
100 105 110

His Lys Leu Ala Asp Val Tyr Phe Val Ser Tyr Phe Leu Asn Lys Gln  
115 120 125

Arg Asn Phe Ser Asn Leu Asp Glu Phe Tyr Asp Ile Gly Leu Lys Ala  
130 135 140

Met Asn Val Asn Lys Asn Glu Val Leu Asn Phe Leu Asn Thr Pro Lys  
145 150 155 160

Ala Lys Glu Ile Leu Ser Glu Phe Gln Arg Ala Asn Asp Ile Ala Lys  
165 170 175

Thr Tyr Gly Thr Pro Ala Phe Val Val Asn Gly Lys Tyr Gln Ile Asn  
180 185 190

Pro Ser Ala Ile Asn Ser Met Gln Asp Leu Glu Asp Leu Val Lys Lys  
195 200 205

Leu Ser Asn Met Lys  
210

<210> 48  
<211> 130  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:48 - Cj1118c)

<400> 48

Met Lys Leu Leu Val Val Asp Asp Ser Ser Thr Met Arg Arg Ile Ile  
1 5 10 15

Lys Asn Thr Leu Thr Arg Leu Gly His Asp Asp Val Leu Glu Ala Glu  
20 25 30

His Gly Val Glu Ala Trp Asp Leu Leu Thr Lys Asn Glu Asp Val Lys  
35 40 45

Val Leu Ile Thr Asp Trp Asn Met Pro Glu Met Asn Gly Leu Glu Leu  
50 55 60

Val Lys Lys Val Arg Ala Glu Lys Lys Tyr Glu Asp Met Pro Ile Ile  
65 70 75 80

Met Val Thr Thr Glu Gly Gly Lys Ala Glu Val Ile Thr Ala Leu Lys  
85 90 95



Sequence\_Listing\_0088562\_015U0.TXT

Ala Gly Val Asn Asn Tyr Ile Val Lys Pro Phe Thr Pro Gln Val Leu  
100 105 110

Lys Glu Lys Leu Glu Asp Val Leu Gly Thr Gly Ser Gly Glu Gly Ala  
115 120 125

Ala Glu  
130

<210> 49

<211> 472

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:49 - Cj1228c)

<400> 49

Met Lys Lys Ile Phe Leu Ser Leu Ser Leu Ala Ser Ala Leu Phe Ala  
1 5 10 15

Ala Ser Ile Asn Phe Asn Glu Ser Thr Ala Thr Ala Asn Arg Val Asn  
20 25 30

Pro Ala Ala Gly Asn Ala Val Leu Ser Tyr His Asp Ser Ile Lys Asp  
35 40 45

Ala Lys Lys Ser Val Val Asn Ile Ser Thr Ser Lys Thr Ile Thr Arg  
50 55 60

Ala Asn Arg Pro Ser Pro Leu Asp Asp Phe Phe Asn Asp Pro Tyr Phe  
65 70 75 80

Lys Gln Phe Phe Asp Phe Asp Phe Ser Gln Arg Lys Gly Lys Asn Asp  
85 90 95

Lys Glu Val Val Ser Ser Leu Gly Ser Gly Val Ile Ile Ser Lys Asp  
100 105 110

Gly Tyr Ile Val Thr Asn Asn His Val Val Asp Asp Ala Asp Thr Ile  
115 120 125

Thr Val Asn Leu Pro Gly Ser Asp Ile Glu Tyr Lys Ala Lys Leu Ile  
130 135 140

Gly Lys Asp Pro Lys Thr Asp Leu Ala Val Ile Lys Ile Glu Ala Asn  
145 150 155 160

Asn Leu Ser Ala Ile Thr Phe Thr Asn Ser Asp Asp Leu Met Glu Gly  
165 170 175

Sequence\_Listing\_0088562\_015uS0.TXT

Asp Val Val Phe Ala Leu Gly Asn Pro Phe Gly Val Gly Phe Ser Val  
180 185 190

Thr Ser Gly Ile Ile Ser Ala Leu Asn Lys Asp Asn Ile Gly Leu Asn  
195 200 205

Gln Tyr Glu Asn Phe Ile Gln Thr Asp Ala Ser Ile Asn Pro Gly Asn  
210 215 220

Ser Gly Gly Ala Leu Val Asp Ser Arg Gly Tyr Leu Val Gly Ile Asn  
225 230 235 240

Ser Ala Ile Leu Ser Arg Gly Gly Gly Asn Asn Gly Ile Gly Phe Ala  
245 250 255

Ile Pro Ser Asn Met Val Lys Asp Ile Ala Lys Lys Leu Ile Glu Lys  
260 265 270

Gly Lys Ile Asp Arg Gly Phe Leu Gly Val Thr Ile Leu Ala Leu Gln  
275 280 285

Gly Asp Thr Lys Lys Ala Tyr Lys Asn Gln Glu Gly Ala Leu Ile Thr  
290 295 300

Asp Val Gln Lys Gly Ser Ser Ala Asp Glu Ala Gly Leu Lys Arg Gly  
305 310 315 320

Asp Leu Val Thr Lys Val Asn Asp Lys Val Ile Lys Ser Pro Ile Asp  
325 330 335

Leu Lys Asn Tyr Ile Gly Thr Leu Glu Ile Gly Gln Lys Ile Ser Leu  
340 345 350

Ser Tyr Glu Arg Asp Gly Glu Asn Lys Gln Ala Ser Phe Ile Leu Lys  
355 360 365

Gly Glu Lys Glu Asn Pro Lys Gly Val Gln Ser Asp Leu Ile Asp Gly  
370 375 380

Leu Ser Leu Arg Asn Leu Asp Pro Arg Leu Lys Asp Arg Leu Gln Ile  
385 390 395 400

Pro Lys Asp Val Asn Gly Val Leu Val Asp Ser Val Lys Glu Lys Ser  
405 410 415

Lys Gly Lys Asn Ser Gly Phe Gln Glu Gly Asp Ile Ile Ile Gly Val  
420 425 430

Sequence\_Listing\_0088562\_015uS0.TXT

Gly Gln Ser Glu Ile Lys Asn Leu Lys Asp Leu Glu Gln Ala Leu Lys  
435 440 445

Gln Val Asn Lys Lys Glu Phe Thr Lys Val Trp Val Tyr Arg Asn Gly  
450 455 460

Phe Ala Thr Leu Leu Val Leu Lys  
465 470

<210> 50

<211> 511

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:50 - Cj1584c)

<400> 50

Met Leu Arg Trp Phe Val Leu Leu Phe Leu Leu Phe Leu Asn Leu Glu  
1 5 10 15

Ala Lys Ile Pro Lys Asp Thr Leu Ile Ile Ala Val Glu Asn Glu Ile  
20 25 30

Ala Arg Ile Asn Pro Ala Tyr Ser Glu Asp His Asp Ala Val Ile Asn  
35 40 45

Leu Val Phe Ser Gly Leu Thr Arg Phe Asp Glu Asn Met Ser Leu Lys  
50 55 60

Pro Asp Leu Ala Lys Ser Trp Asp Ile Ser Lys Asp Gly Leu Val Tyr  
65 70 75 80

Asp Ile Phe Leu Arg Asp Asp Val Leu Trp His Asp Gly Val Lys Phe  
85 90 95

Ser Ala Asp Asp Val Lys Phe Ser Ile Glu Ala Phe Lys Asn Pro Lys  
100 105 110

Asn Asn Ser Ser Ile Tyr Val Asn Phe Glu Asp Ile Lys Ser Val Glu  
115 120 125

Ile Leu Asn Pro Ser His Val Lys Ile Thr Leu Phe Lys Pro Tyr Pro  
130 135 140

Ala Phe Leu Asp Ala Leu Ser Ile Gly Met Leu Pro Lys His Leu Leu  
145 150 155 160

Glu Asn Glu Asn Leu Asn Thr Ser Ser Phe Asn Gln Asn Pro Ile Gly  
165 170 175

Thr Gly Pro Tyr Lys Phe Val Lys Trp Lys Lys Gly Glu Tyr Val Glu

## Sequence\_Listing\_0088562\_015uS0.TXT

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180
185
190
Phe Lys Ala Asn Glu His Phe Tyr Leu Asp Lys Val Lys Thr Pro Arg
195                200                205
Leu Ile Ile Lys His Ile Phe Asp Pro Ser Ile Ala Ser Ala Glu Leu
210                215
Lys Asn Gly Lys Ile Asp Ala Ala Leu Ile Asp Val Ser Leu Leu Asn
225                230                235
Ile Phe Lys Asn Asp Glu Asn Phe Gly Ile Leu Arg Glu Lys Ser Ala
245                250                255
Asp Tyr Arg Ala Leu Met Phe Asn Leu Asp Asn Glu Phe Leu Lys Asp
260                265                270
Leu Lys Val Arg Gln Ala Leu Asn Tyr Ala Val Asp Lys Glu Ser Ile
275                280                285
Val Lys Asn Leu Leu His Asp Tyr Ala Phe Val Ala Asn His Pro Leu
290                295                300
Glu Arg Ser Trp Ala Asn Ser Lys Asn Phe Lys Ile Tyr Lys Tyr Asp
305                310                315
Pro Lys Lys Ala Glu Asp Leu Leu Val Ser Ala Gly Phe Lys Lys Asn
325                330                335
Lys Asp Gly Asn Phe Glu Lys Asp Gly Lys Ile Leu Glu Phe Glu Ile
340                345                350
Trp Ala Met Ser Asn Asp Pro Leu Arg Val Ser Leu Ala Gly Ile Leu
355                360                365
Gln Ser Glu Phe Arg Lys Ile Gly Val Val Ser Lys Val Val Ala Lys
370                375                380
Pro Ala Gly Ser Phe Asp Tyr Ser Lys Val Asp Ser Phe Leu Ile Gly
385                390                395
Trp Gly Ser Pro Leu Asp Pro Asp Phe His Thr Phe Arg Val Phe Glu
405                410                415
Ser Ser Gln Asp Ser Ala Leu Asn Asp Glu Gly Trp Asn Phe Gly His
420                425                430
Tyr His Asp Lys Lys Val Asp Ile Ala Leu Gln Lys Ala Arg Asn Thr

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435

440

445

Ser Asn Leu Glu Glu Arg Lys Lys Tyr Tyr Lys Asp Phe Ile Asp Ala  
 450 455 460

Leu Tyr Glu Asn Pro Pro Phe Ile Phe Leu Ala Tyr Leu Asp Phe Ala  
 465 470 475 480

Leu Val Tyr Asn Lys Asp Leu Lys Gly Ile Lys Thr Arg Thr Leu Gly  
 485 490 495

His His Gly Val Gly Phe Thr Trp Asn Val Tyr Glu Trp Ser Lys  
 500 505 510

&lt;210&gt; 51

&lt;211&gt; 268

&lt;212&gt; PRT

&lt;213&gt; Campylobacter jejuni (SEQ ID NO:51 - Cj1617)

&lt;400&gt; 51

Met Lys Lys Ile Leu Ile Ile Met Ser Leu Phe Leu Ile Ala Leu Asn  
 1 5 10 15

Ala Lys Glu Arg Leu Val Val Leu Asp Pro Ala Ser Ile Glu Thr Leu  
 20 25 30

Phe Met Leu Lys Ala Glu Asp Gln Ile Val Gly Ile Ala Thr Leu Gln  
 35 40 45

His Ser Asn Ile Tyr Pro Lys Asp Gln Thr Ser Lys Leu Thr Ser Val  
 50 55 60

Gly Thr Phe Ser Asn Pro Ser Leu Glu Lys Ile Val Ala Leu Lys Pro  
 65 70 75 80

Ser Leu Val Ile Leu Ser Ser Tyr Ser Leu Asn Leu Glu Glu Gly Leu  
 85 90 95

Lys Asn Phe Gly Ile Lys Ser Ile Asn Leu Lys Ala Glu Arg Leu Glu  
 100 105 110

Asp Ile Thr Lys Asn Ile Thr Thr Leu Gly Gln Ile Thr Lys Lys Glu  
 115 120 125

Lys Glu Ala Glu Leu Leu Lys Gln Glu Phe Asn Gln Lys Phe Lys Lys  
 130 135 140

Leu Ser Asp Lys Pro Leu Asn Lys Ser Ala Ile Tyr Leu Tyr Ser Ser  
 145 150 155 160

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Asn Pro Leu Met Ala Phe Asn Asp Asn Ser Leu Ile Ala Asp Ile Leu  
165 170 175

Arg Leu Ile Gly Ile Lys Asn Leu Ser Pro Gln Ser Gln Ile Ser Arg  
180 185 190

Pro Val Ile Ser Ala Glu Tyr Ile Leu Lys Gln Asn Pro Asp Ile Leu  
195 200 205

Ile Leu Gly Ile Asn Ala Lys Asn Asn Leu Leu Asp Thr Asn Ala Leu  
210 215 220

Leu Lys Asn Thr Lys Ala Val Lys Thr Gly Ser Ile Tyr Phe Asn Lys  
225 230 235 240

Asp Thr Pro Ile Leu Leu Arg Leu Ser Pro Lys Ile Ile Asp Arg Ile  
245 250 255

Gln Glu Phe Lys Thr Lys Leu Glu Asn Asn Asn Phe  
260 265

<210> 52  
<211> 33  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:52 - fragment of Cj0092)

<400> 52

Thr Gln Gln Asp Ile Asn Thr Gln Asn Glu Met Ser Asp Ala Ser Thr  
1 5 10 15

Lys Asp Ile Thr Pro Lys Ser Ile Glu Asp Phe Phe Glu Glu Phe Ala  
20 25 30

Asp

<210> 53  
<211> 25  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:53 - fragment of Cj0092)

<400> 53

Gly Ile Thr Lys Asp Gly Lys Thr Phe Tyr Thr Gly Lys Ser Thr Val  
1 5 10 15

Ala Val Asn Asp Thr Asp Pro Gln Phe  
20 25

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<210> 54  
 <211> 36  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:54 - fragment of Cj0092)

<400> 54

Arg Ile Ala Thr Ser Lys Ile Gln Asn Tyr Glu Ala Asp Asn Ser Thr  
 1 5 10 15

Asn Ala Lys Glu Phe Asp Glu Leu Pro Lys Gly Asp Lys Val Asp Gln  
 20 25 30

Ile Leu Asn Lys  
 35

<210> 55  
 <211> 36  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:55 - fragment of Cj0092)

<400> 55

Gln Leu Asp Lys Ala Leu Lys Asp Leu Gly Ile Asp Thr Asn Ser Leu  
 1 5 10 15

Ser Glu Asp Arg Lys Lys Thr Leu Leu Lys Gln Glu Phe Leu Asn Lys  
 20 25 30

Thr Met Thr Asn  
 35

<210> 56  
 <211> 28  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:56 - fragment of Cj0092)

<400> 56

Thr Ile Val Thr Gln Arg Arg Gly Glu Tyr Asp Val Gly Val Val Ala  
 1 5 10 15

Val Ile Ser Asn Lys Thr Arg Gln Leu Ala Lys Asp  
 20 25

<210> 57  
 <211> 26  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:57 - fragment of Cj0092)

<400> 57

Ala Ile Ser Glu Tyr Leu Pro Lys Asp Thr Lys Gly Phe Leu Asn Glu  
 1 5 10 15

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Tyr Gly Ile Arg Leu Val Tyr Asp Glu Asn  
20 25

<210> 58  
<211> 18  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:58 - fragment of Cj0092)  
<400> 58

Asp Pro Ser Asn Ala Lys Lys Thr Asn Ile Leu Glu Asp Arg Ala Lys  
1 5 10 15

Glu Thr

<210> 59  
<211> 17  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:59 - fragment of Cj0092)  
<400> 59

Leu Ser Leu Lys Asp Glu Arg Thr Thr Gly Asp Thr Tyr Glu Glu Ile  
1 5 10 15

Ile

<210> 60  
<211> 15  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:60 - fragment of Cj0092)  
<400> 60

Val Asn Asp Ser Ser Thr Gln Glu Gln Thr Gln Asn Ile Thr Asn  
1 5 10 15

<210> 61  
<211> 12  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:61 - fragment of Cj0092)  
<400> 61

Thr Leu Lys Lys Trp Ser Tyr Thr Ser Glu Asn Gly  
1 5 10

<210> 62  
<211> 33  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:62 - fragment of Cj0092)  
<400> 62

Tyr Ser Tyr Glu Asn Leu Ala Asn Thr Asn Glu Ala Leu Asn Ser Lys



1 5 Ser Asn Ala Thr Lys Asn Glu Ala Lys Lys Ser Ser Ser Ile Gln Arg  
20 25 30

Ser

<210> 63  
<211> 25  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:63 - fragment of Cj0143c)

<400> 63

Ile Phe Tyr Thr Phe Thr Gln Ala Lys Asn Leu Glu Gln Glu Gln Asn  
1 5 10 15

Thr Ser Ser Asn Leu Val Ser Val Ser  
20 25

<210> 64  
<211> 27  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:64 - fragment of Cj0143c)

<400> 64

Leu Pro Pro Asn Ser Asn Glu His Asn Phe Glu Phe Lys Pro Ser Thr  
1 5 10 15

Met Lys Lys Leu Glu Lys Ser Asp Ile Tyr Phe  
20 25

<210> 65  
<211> 24  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:65 - fragment of Cj0143c)

<400> 65

Leu Glu Phe Glu Lys Val Phe Thr Asp Lys Phe Lys Gln Asn Phe Pro  
1 5 10 15

Lys Leu Gln Val Ile Asn Met Gln  
20

<210> 66  
<211> 27  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:66 - fragment of Cj0143c)

<400> 66

Ile Gln Thr His Asp Thr His Glu His Ser His Glu His Glu His His  
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1

5

10

15

Glu His Gly His Phe Asp Pro His Thr Trp Leu  
20 25

&lt;210&gt; 67

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Campylobacter jejuni (SEQ ID NO:67 - fragment of Cj0143c)

&lt;400&gt; 67

Asp Thr Leu Ile Gln Lys Tyr Pro Gln Asn Glu Asn Leu Tyr Lys Glu  
1 5 10 15

Asn Leu Asp Lys  
20

&lt;210&gt; 68

&lt;211&gt; 10

&lt;212&gt; PRT

&lt;213&gt; Campylobacter jejuni (SEQ ID NO:68 - fragment of Cj0143c)

&lt;400&gt; 68

Ser Lys Leu Glu Lys Leu Lys Asn Arg Glu  
1 5 10

&lt;210&gt; 69

&lt;211&gt; 8

&lt;212&gt; PRT

&lt;213&gt; Campylobacter jejuni (SEQ ID NO:69 - fragment of Cj0143c)

&lt;400&gt; 69

Tyr Phe Ala Lys Arg Tyr Asn Leu  
1 5

&lt;210&gt; 70

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Campylobacter jejuni (SEQ ID NO:70 - fragment of Cj0143c)

&lt;400&gt; 70

Gly Lys Glu Pro Lys Ser Lys Asp Leu Gln Lys  
1 5 10

&lt;210&gt; 71

&lt;211&gt; 8

&lt;212&gt; PRT

&lt;213&gt; Campylobacter jejuni (SEQ ID NO:71 - fragment of Cj0143c)

&lt;400&gt; 71

Leu Met Lys Asp Lys Asn Leu Lys  
1 5

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<210> 72  
 <211> 22  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:72 - fragment of Cj0143c)

<400> 72

Gln Asn Gly Phe Pro Glu Asn Ala Ala Lys Thr Leu Ala Lys Glu Cys  
 1 5 10 15

Asp Ala Lys Ile Tyr Lys  
 20

<210> 73  
 <211> 18  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:73 - fragment of Cj0143c)

<400> 73

Asp His Leu Ser Tyr Asp Trp Glu Asn Glu Leu Leu Lys Thr Ala Asp  
 1 5 10 15

Ala Phe

<210> 74  
 <211> 23  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:74 - fragment of Cj0420)

<400> 74

Phe Ala Lys Glu Tyr Thr Leu Asp Lys Ala His Thr Asp Val Gly Phe  
 1 5 10 15

Lys Ile Lys His Leu Gln Ile  
 20

<210> 75  
 <211> 28  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:75 - fragment of Cj0420)

<400> 75

Val Lys Gly Asn Phe Lys Asp Tyr Ser Ala Val Ile Asp Phe Asp Pro  
 1 5 10 15

Ala Ser Ala Glu Phe Lys Lys Leu Asp Val Thr Ile  
 20 25

<210> 76  
 <211> 19

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<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:76 - fragment of Cj0420)

<400> 76

Ser Val Asn Thr Glu Asn Gln Thr Arg Asp Asn His Leu Gln Gln Asp  
1 5 10 15

Asp Phe Phe

<210> 77  
<211> 15  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:77 - fragment of Cj0420)

<400> 77

Asp Phe Phe Lys Ala Lys Lys Tyr Pro Asp Met Thr Phe Thr Met  
1 5 10 15

<210> 78  
<211> 18  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:78 - fragment of Cj0420)

<400> 78

Thr Phe Thr Met Lys Lys Tyr Glu Lys Ile Asp Asn Glu Lys Gly Lys  
1 5 10 15

Met Thr

<210> 79  
<211> 14  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:79 - fragment of Cj0420)

<400> 79

Gly Val Ala Lys Gly Lys Asp Gly Lys Glu Lys Ile Gly Phe  
1 5 10

<210> 80  
<211> 15  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:80 - fragment of Cj0420)

<400> 80

Leu Asn Gly Lys Ile Lys Arg Ser Asp Phe Lys Phe Ala Thr Ser  
1 5 10 15

<210> 81  
<211> 7  
<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:81 - fragment of Cj0420)

<400> 81

Glu Val Glu Ala Asn Glu Lys  
1 5

<210> 82

<211> 12

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:82 - fragment of Cj0715)

<400> 82

Leu Ser Ala Thr Glu Tyr Gln Leu Ser Thr His Val  
1 5 10

<210> 83

<211> 16

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:83 - fragment of Cj0715)

<400> 83

Ile Thr Ser Gly Gln Pro Ala Pro Lys Val Lys Val Glu Leu Tyr Lys  
1 5 10 15

<210> 84

<211> 22

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:84 - fragment of Cj0715)

<400> 84

Leu Glu Ala Asn Gln Gln Trp Lys Lys Val Ser Glu Glu Phe Thr Glu  
1 5 10 15

Glu Asn Gly Arg Ile Gly  
20

<210> 85

<211> 13

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:85 - fragment of Cj0715)

<400> 85

Leu Leu Pro Tyr Glu Lys Ala Glu Asn Arg Ala Phe Gly  
1 5 10

<210> 86

<211> 16

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:86- fragment of Cj0715)

<400> 86

Lys Phe Phe Thr Lys Asp Tyr Tyr Thr Ser His Lys Ile Asn Thr Phe

1                      5                      10                      15  
 <210> 87  
 <211> 15  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:87 - fragment of Cj0715)  
 <400> 87  
 Ser Phe Glu Leu Ser Lys Asp Gln Lys His Tyr His Val Pro Ile  
 1                      5                      10                      15  
 <210> 88  
 <211> 9  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:88 - fragment of Cj0715)  
 <400> 88  
 Phe Gly Tyr Ser Thr Tyr Arg Gly Ser  
 1                      5  
 <210> 89  
 <211> 24  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:89 - fragment of Cj0772c)  
 <400> 89  
 Ile Leu Glu Gln Val Lys Pro Asp Leu Glu Lys Gln Gly Tyr Lys Leu  
 1                      5                      10                      15  
 Glu Ile Lys Glu Phe Thr Asp Tyr  
 20  
 <210> 90  
 <211> 23  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:90 - fragment of Cj0772c)  
 <400> 90  
 Gly Glu Ala Asp Ala Asn Phe Phe Gln His Thr Pro Tyr Leu Glu Glu  
 1                      5                      10                      15  
 Phe Asn Lys Asn Lys Gly Thr  
 20  
 <210> 91  
 <211> 15  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:91 - fragment of Cj0772c)  
 <400> 91  
 Ala Val Tyr Ser Lys Lys Tyr Lys Ser Leu Asp Asp Ile Lys Glu  
 1                      5                      10                      15

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<210> 92  
 <211> 12  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:92 - fragment of Cj0772c)

<400> 92

Ile Pro Asn Asp Pro Thr Asn Glu Ser Arg Ala Leu  
 1 5 10

<210> 93  
 <211> 39  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:93 - fragment of Cj0772c)

<400> 93

Lys Gly Leu Val Lys Phe Lys Asp Lys Ala Leu Lys Thr Pro Leu Asp  
 1 5 10 15

Ile Ile Asp Asn Pro Lys Lys Ile Lys Phe Val Glu Leu Lys Pro Ala  
 20 25 30

Gln Leu Pro Arg Ala Leu Asn  
 35

<210> 94  
 <211> 21  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:94 - fragment of Cj0772c)

<400> 94

Ala Asn Leu Asn Pro Ala Lys Asp Ser Val Phe Ile Glu Asp Lys Glu  
 1 5 10 15

Ser Pro Tyr Ala Asn  
 20

<210> 95  
 <211> 29  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:95 - fragment of Cj0772c)

<400> 95

Gly His Glu Asn Asp Pro Lys Ile Lys Ala Leu Ile Gln Ala Leu Gln  
 1 5 10 15

Ser Asp Lys Ile Lys Gln Phe Ile Ile Glu Lys Tyr Asn  
 20 25

<210> 96  
 <211> 31

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<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:96 - fragment of Cj1018c)

<400> 96

Asn Gly Asp Lys Val Ser Leu Ala Ile Ile Asp Thr Lys Gly Asp Lys  
1 5 10 15

Leu Glu Ser Ser Ser Gly Ala Asn Arg Leu Val Ser Gln Asp Lys  
20 25 30

<210> 97

<211> 30

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:97 - fragment of Cj1018c)

<400> 97

Val Ala Glu Asp Asn Lys Ile Pro Leu Ile Ala Pro Ala Ala Thr Gly  
1 5 10 15

Asp Arg Leu Leu Asp Lys Lys Ile Tyr Ser Ser Arg Val Cys  
20 25 30

<210> 98

<211> 39

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:98 - fragment of Cj1018c)

<400> 98

Tyr Val Phe Ser Lys Leu Asn Tyr Lys Ser Ala Val Ile Val Val Asp  
1 5 10 15

Gln Ser Thr Asp Tyr Ser Leu Gly Leu Ala Lys Ala Phe Glu Lys Gln  
20 25 30

Tyr Lys Ser Asn Gly Gly Gln  
35

<210> 99

<211> 41

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:99 - fragment of Cj1018c)

<400> 99

Asn Ser Gly Asp Lys Asp Phe Arg Ala Ile Val Ala Gln Val Lys Ser  
1 5 10 15

Leu Asn Pro Glu Phe Ile Phe Leu Pro Leu Tyr Tyr Ser Glu Ala Ser  
20 25 30

Leu Phe Ala Arg Gln Ser Lys Leu Ala  
35 40



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<210> 100  
 <211> 41  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:100 - fragment of Cj1018c)

<400> 100

Gly Tyr Ile Phe Thr Asp Ser Phe Asp Ala Asn Asn Pro Thr Thr Lys  
 1 5 10 15

Leu Ser Lys Glu Phe Ile Ser Val Tyr Glu Lys Ala Lys Gly Thr Lys  
 20 25 30

Glu Val Pro Asn Phe Ser Ala Met Gly  
 35 40

<210> 101  
 <211> 15  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:101 - fragment of Cj1018c)

<400> 101

Val Asn Glu Lys Ile His Gln Thr Lys Asn Tyr Gln Gly Val Ser  
 1 5 10 15

<210> 102  
 <211> 26  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:102 - fragment of Cj1018c)

<400> 102

Gln Thr Gly Asn Ala Thr Arg Ser Val Val Val Lys Glu Ile Lys Asn  
 1 5 10 15

Gln Lys Gln Asn Tyr Lys Asp Ile Ile Asn  
 20 25

<210> 103  
 <211> 14  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:103 - fragment of Cj1380)

<400> 103

Glu Leu Asn Gly Gln Lys Gln Glu Asn Ile Leu Phe Thr Lys  
 1 5 10

<210> 104  
 <211> 31  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:104 - fragment of Cj1380)

<400> 104

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Ser Tyr Ala Gln Glu Tyr Glu Met Lys Lys Phe Gln Glu Ala Arg Glu  
1 5 10 15

Asn Phe Thr Lys Asn Ala Lys Ala Val Ala Gln Lys Glu Thr Met  
20 25 30

<210> 105  
<211> 12  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:105 - fragment of Cj1380)

<400> 105

Val Ile Ala Leu Gly Asp Lys Asn Lys Pro Ala Ile  
1 5 10

<210> 106  
<211> 14  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:106 - fragment of Cj1380)

<400> 106

His Leu Ala Gln Ile Asp Asp Glu Leu Lys Asn Tyr Gln Val  
1 5 10

<210> 107  
<211> 16  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:107 - fragment of Cj1380)

<400> 107

Tyr Lys Glu Ala Lys Lys Ala Lys Asn Asp Lys Glu Lys Ile Ala Ile  
1 5 10 15

<210> 108  
<211> 33  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:108 - fragment of Cj1380)

<400> 108

Leu Asn Lys Tyr Tyr Asp Ala Asn Ile Lys Asn Tyr Pro Lys Val Ser  
1 5 10 15

Asp Ala Glu Leu Lys Glu Val Phe Ser Leu Tyr Glu Lys Tyr Arg Ser  
20 25 30

Leu

<210> 109  
<211> 23  
<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:109 - fragment of Cj1643)

<400> 109

Gly Ile Glu Arg Pro Lys Phe Glu Asp Phe Leu Ala Gly Tyr Glu Arg  
1 5 10 15

Asn Lys Ala Ser Met Leu Asn  
20

<210> 110

<211> 18

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:110 - fragment of Cj1643)

<400> 110

Leu Lys Gln Pro Asn Ala Lys Leu Asn Lys Tyr Val Lys Tyr Asp Pro  
1 5 10 15

Phe Leu

<210> 111

<211> 26

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:111 - fragment of Cj1643)

<400> 111

Pro Thr Pro Met Gly Asp Glu Glu Lys Leu Thr Arg Asn Asp Trp Val  
1 5 10 15

Gly Ile Trp Asp Pro Asn Lys Pro Tyr Ile  
20 25

<210> 112

<211> 15

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:112 - fragment of Cj1643)

<400> 112

Ala Gln Asn Ile Asp Glu Lys Asp Gln Leu Asp Phe Asn Ser Lys  
1 5 10 15

<210> 113

<211> 15

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:113 - fragment of Cj1643)

<400> 113

Gly Asn Arg Tyr Leu Lys His Phe Met Lys Tyr Asn Asp Val Tyr  
1 5 10 15

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<210> 114  
 <211> 19  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:114 - fragment of Cj1643)

<400> 114

Val Val Arg Glu Asn Lys Ile Tyr Val Asn Asn Val Arg Lys Asn Pro  
 1 5 10 15

Gln Phe Leu

<210> 115  
 <211> 11  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:115 - fragment of Cj1643)

<400> 115

Pro Ala Asn Asp Leu Arg Lys Leu Asn Glu Lys  
 1 5 10

<210> 116  
 <211> 18  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:116 - fragment of Cj1643)

<400> 116

Asp Arg Gly Ser Thr Leu Tyr Phe Gln Val Leu Arg Asp Asn Met Asp  
 1 5 10 15

Leu Asn

<210> 117  
 <211> 18  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:117 - fragment of Cj1643)

<400> 117

Ala Lys Asp Leu Ser Lys Phe Asn Leu Pro Asp Ser Lys Pro Lys Pro  
 1 5 10 15

Lys Ile

<210> 118  
 <211> 13  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:118 - fragment of Cj1643)

<400> 118

Thr Lys Ile Asp Pro Lys Ser Lys Val Ser Asn Ala Gly

1

5

10

<210> 119  
 <211> 15  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:119 - fragment of Cj1643)

<400> 119

Leu Ile Glu Arg Lys Ser Thr Lys Leu Pro Leu Ser Asn Phe Asn  
 1 5 10 15

<210> 120  
 <211> 570  
 <212> DNA  
 <213> Campylobacter jejuni (SEQ ID NO:120 - ACE393, ML53 (0:19))

<400> 120  
 atgaaaaaag ttttattgag ttcattggtt gcggtgtctt tgtaagcac aggtttgttt 60  
 gctaaagaat atactttaga taaagcacat acagatgtag gttttaaat caaacattta 120  
 caaattagca atgtaaaaag aaatttcaaa gattattctg cggtgattga ttttgaccct 180  
 gcgagtctg aatttaaaaa gcttgatgca actataaaaa tcgcatctgt aaatacagaa 240  
 aatcaacaa gagataatca cttacagcaa gatgattttt tcaaagcaaa aaaatatcct 300  
 gatatgactt ttacaatgaa aaaatatgaa aaaatcgata atgaaaaagg taaatgaca 360  
 ggaactttaa ctatagctgg agtttctaaa gatatcggtt tagatactga aatcgcggt 420  
 gtagctaaag gcaaagatgg aaaagaaaaa ataggctttt ctttaaatgg aaaaatcaaa 480  
 cgctctgatt ttaaatttgc agcaagtact tcaactatta ctttaagtga tgatattaat 540  
 ttaaatatcg aagttgaagc gaacgaaaaa 570

<210> 121  
 <211> 13  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:121)

<400> 121

Asp Ile Val Leu Asp Thr Glu Ile Gly Gly Val Ala Lys  
 1 5 10

<210> 122  
 <211> 25  
 <212> PRT  
 <213> Campylobacter jejuni (SEQ ID NO:122)

<400> 122

Phe Ala Ala Ser Thr Ser Thr Ile Thr Leu Ser Asp Asp Ile Asn Leu  
 1 5 10 15

Asn Ile Glu Val Glu Ala Asn Glu Lys

<210> 123  
<211> 6  
<212> PRT  
<213> Campylobacter jejuni (SEQ ID NO:123)

<400> 123

Leu Asp Ala Thr Ile Lys  
1 5